The Architectural Record

December 1921

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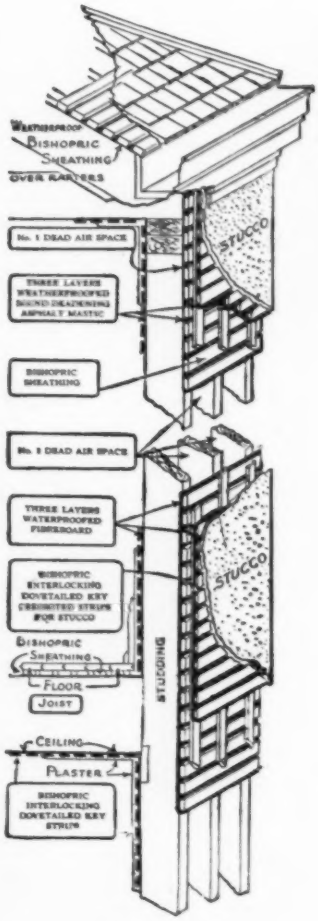

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THE
ARCHITECTVRAL RECORD

CONTENTS

Vol. L. No. 6 DECEMBER, 1921 Serial No. 279

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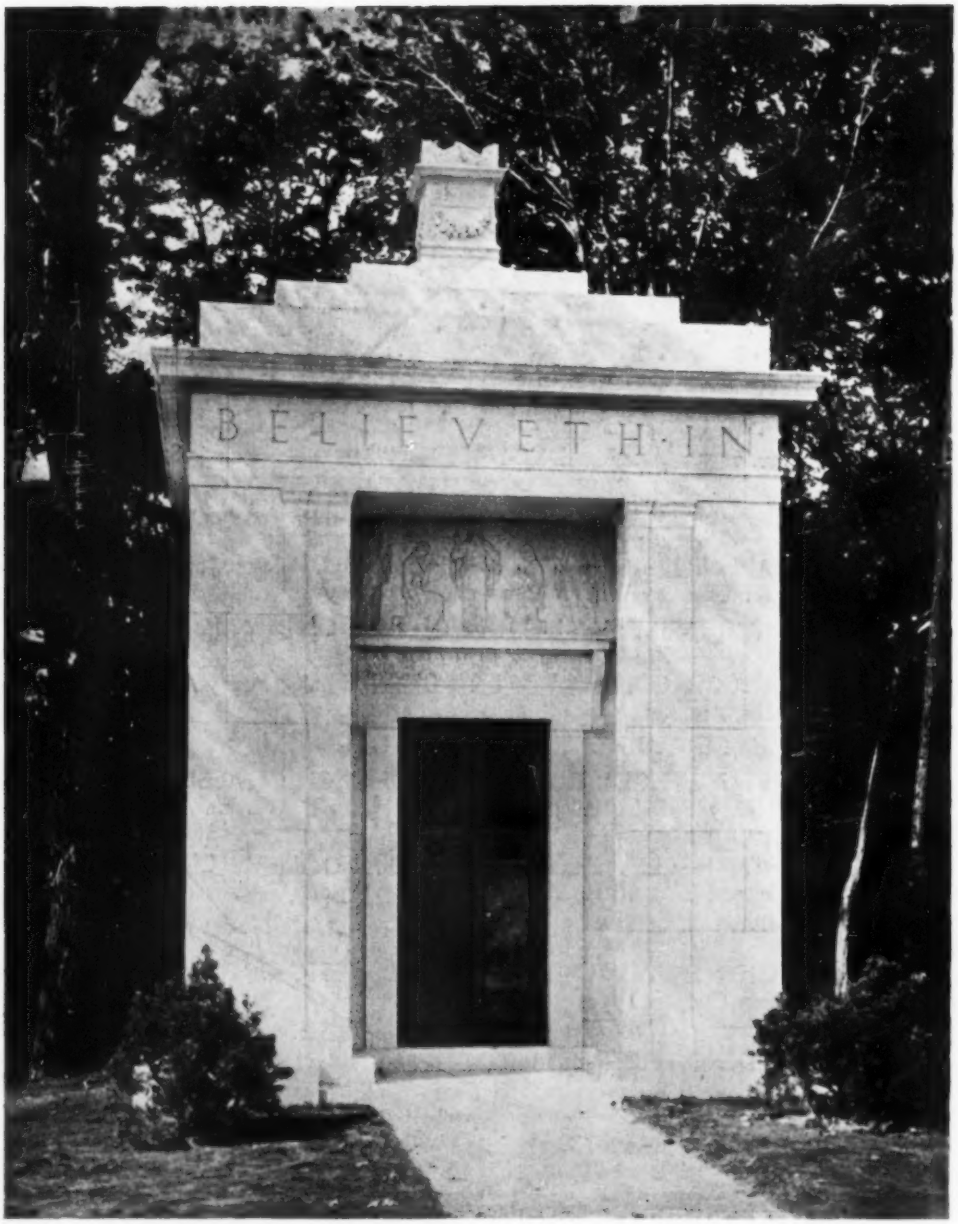
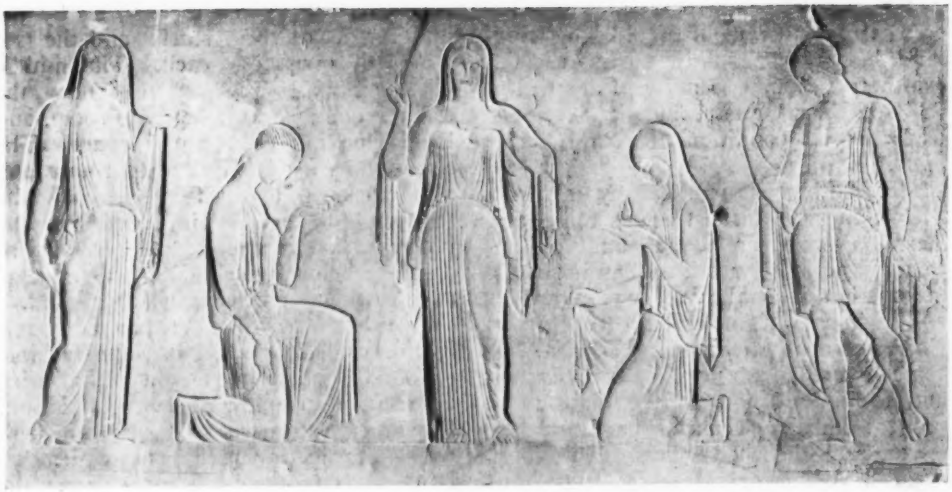


MAUSOLEUM FOR THE DAVIS FAMILY, PORTLAND, MAINE.



PANEL OVER ENTRANCE DOOR OF DAVIS MAUSOLEUM.
Lorenzo Maldavelli, Sculptor.

THE WORK OF WILLIAM·LAWRENCE·BOTTOMLEY

PART -II-

By Arthur Willis Colton

AMERICANS are in the process of realizing, for architectural and landscape gardening purposes, that their climate is not English; for in spite of some steps in the process, such as furnaces and broad verandahs, the inevitable conclusions from that climate are still far from attainment. The present interest in Italian precedents has probably somewhere in it a feeling that the climate is more Italian than English, and in due time we shall react to the perception that it is not Italian either; but meanwhile, for the purposes of summer residence, the Italian is the better analogy.

The true doctrine is to seek after the fittest. The fittest will survive in the long run, and whoever finds it now will best satisfy the taste of posterity. The house that feels most comfortable and harmonious in its setting—in its situation, in its relations to the country round about, in its conditions of sunshine and rain, of budding and falling leaf—is the house that is, artistically, "most founded on a rock." It is a doctrine that militates against all wholesale transfer of styles and periods in the lump. It admits any amount of borrowing provided there is a molding force at work, a selection, a taste that is alive and alert. An American house need be no less American, as a play of Shakespeare's is no less English because a plot or an episode, a plan or a detail, comes from Italy.

The New England Colonial probably fitted the temperament of old New England, but only partially the climate. The Southern Colonial seems well adapted to the southern climate, but it developed under social conditions that no longer exist.

Mr. Bottomley's work always shows a "selection and taste that is alive and alert." Whenever he has built an apparently period house it seldom is strictly period, but it is always harmonious.

The house originally built for Mr. J. C. Wise, near Richmond, Virginia, has some resemblance in outline to Westover and Mount Vernon, in the high, more or less imposing central part and the lower, semi-detached wings. This loose breadth and spaciousness seems to have a correspondence to old social, and permanent climatic, conditions of the South; as the more compact Northern Colonial had its relations with the social and climatic conditions of the North. The social demands of modern life have been radically changed, and the chief cause of the difference is the increase of mechanical devices. Climatically it is mainly a matter of furnace heat. Socially the causes are complex.

But these demands affect interiors more than exteriors. The modern needs for system, order and convenience can be met within the frame and shell of the old exteriors, and this was achieved in the Wise house, while the old charm of contrast between the high central part, with its steep roof and the low spreading wings, still remains.

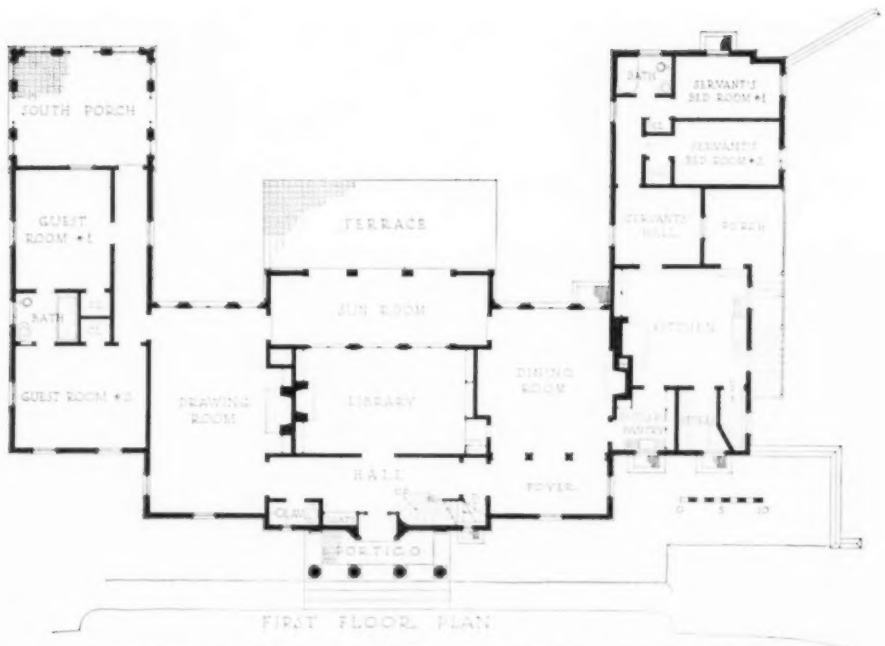
The Davies house at Roslyn, Long Island, is not a period house, though it looks like an 18th century colonial. It is personal and polychrome. It is a cream-colored stucco house with Greek columns and Venetian grilles. The roof is peacock blue, and there are cerulean blues on the window frames, black caps on the chimneys, big terra cotta panels over either side of the vestibule, and brilliant terra cotta colors against the buff-colored stucco. Yet it all looks quiet, for everything is in almost the same key and scale. It stands on top of a wooded hill, with an open court to the south surrounded on three sides by the middle part of three stories and the two wings of one story each. The middle part contains on the ground floor the dining room, library, drawing room, and loggia looking out on the court. The southwest wing has two guest rooms and a porch open to all the breezes. The southeast or service wing goes over the hill and has two stories at the back, with a garage below, which gives it an appearance of fitting and clinging to the hill.

The house of Mr. Walter G. Davis in Portland, Maine, is, in some fashion, of a William and Mary type, a brick house facing west, with a view of Mount Washington. It has a long façade with slightly projecting pavilions at either end. In the library the book cases are at the two ends; the windows are on the west side; and on the east side opposite is a large scenic wall paper of Boston harbor, printed from old blocks. The so-called "William and Mary" style shows a strong Dutch influence of the Renaissance which came through Holland. It looks stronger and more virile than English Georgian. Dutch building is largely of brick, and it runs to soft reds and browns rather than bright red.

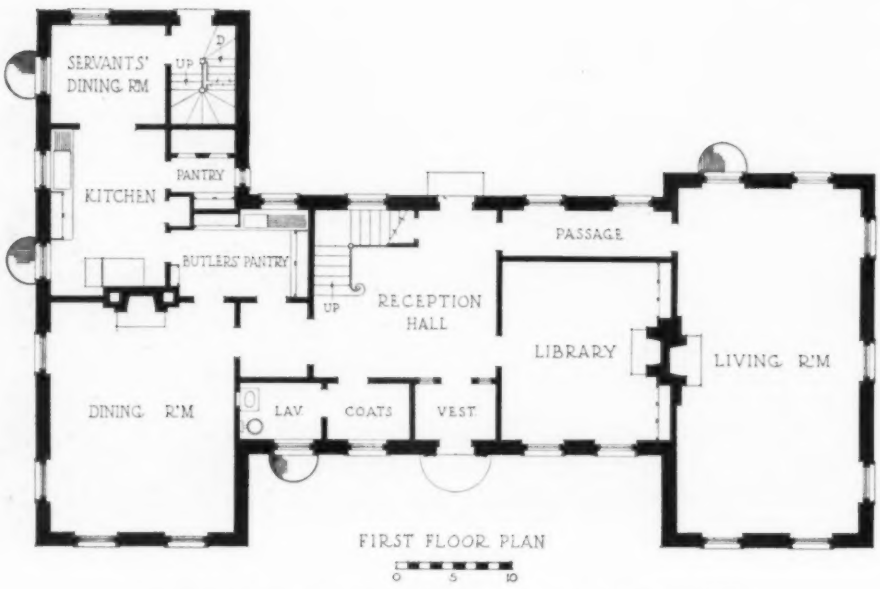
The house of Mr. Faris Russell at Mill Neck, Long Island, in appearance is a typical Long Island farm house, but is planned to adapt itself to the complex requirements of a modern establishment. All the main rooms face south to the garden side; the entrance halls, kitchens, pantry, servants' dining room and other service functions face north. A gardener's and caretaker's house is placed on the east side of the service court, connected with the house itself by a high wall with gates, and these completely surround this court, enclosing and hiding the green houses, root cellar, garages, tool sheds and other service buildings.

To turn from these country houses to the large apartment house at 1049 Park Avenue, designed in association with Mr. J. L. Mills, is to be reminded again of Mr. Bottomley's versatility. The design is an interesting expression of the construction. A modern fireproof apartment house is a great frame of columns and

RESIDENCE OF J. C. WISE, ESQ., WESTEAM, VA.

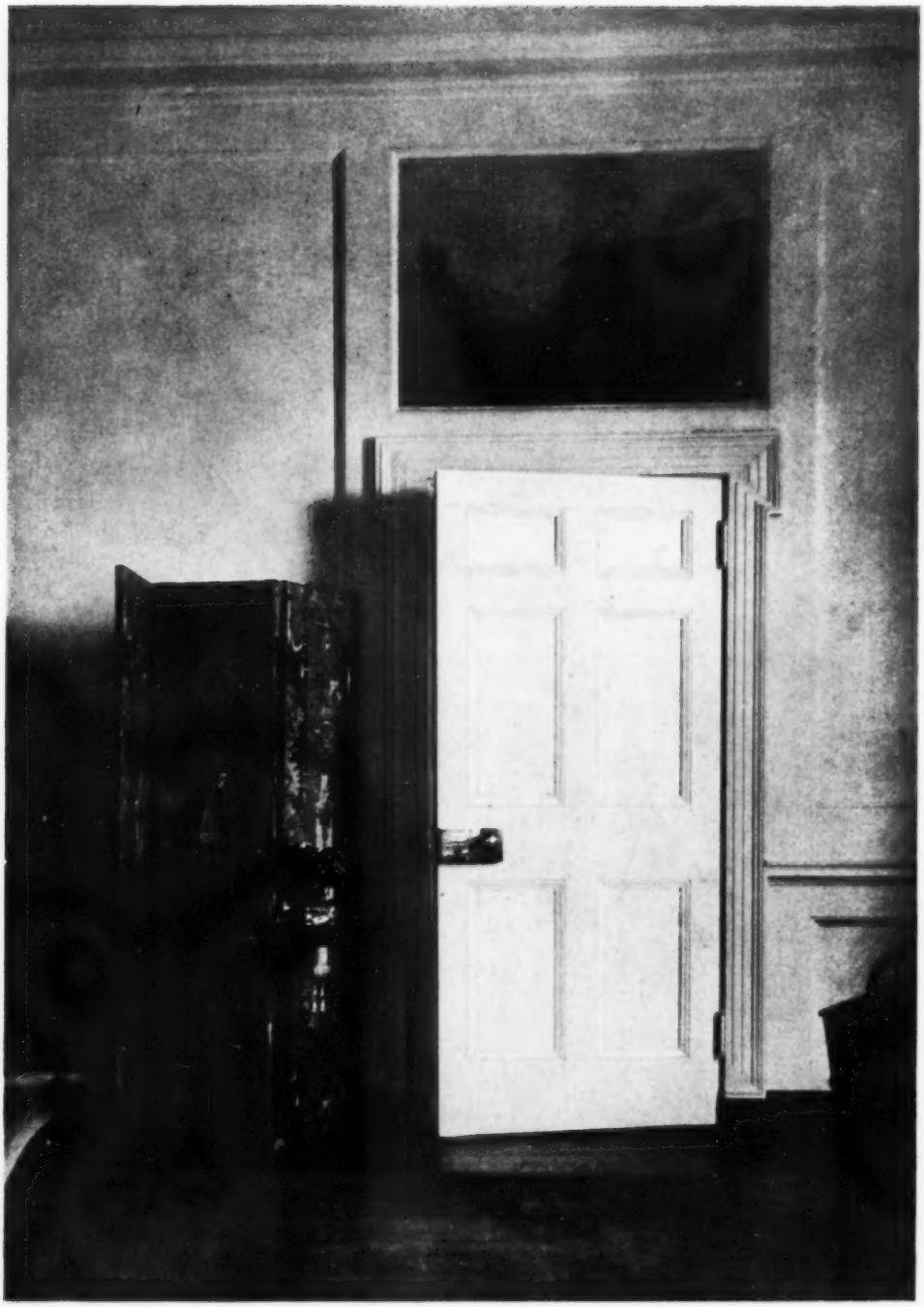


RESIDENCE OF ERNEST P. DAVIES, ESQ., ROSLYN, LONG ISLAND, N. Y.



RESIDENCE OF WALTER G. DAVIS, ESQ., PORTLAND, MAINE.

RESIDENCE OF J. C. WISE, ESQ., WESTHAM, VA.



DOORWAY IN DRAWING ROOM, RESIDENCE OF J. C. WISE, ESQ., WESTHAM, VA.

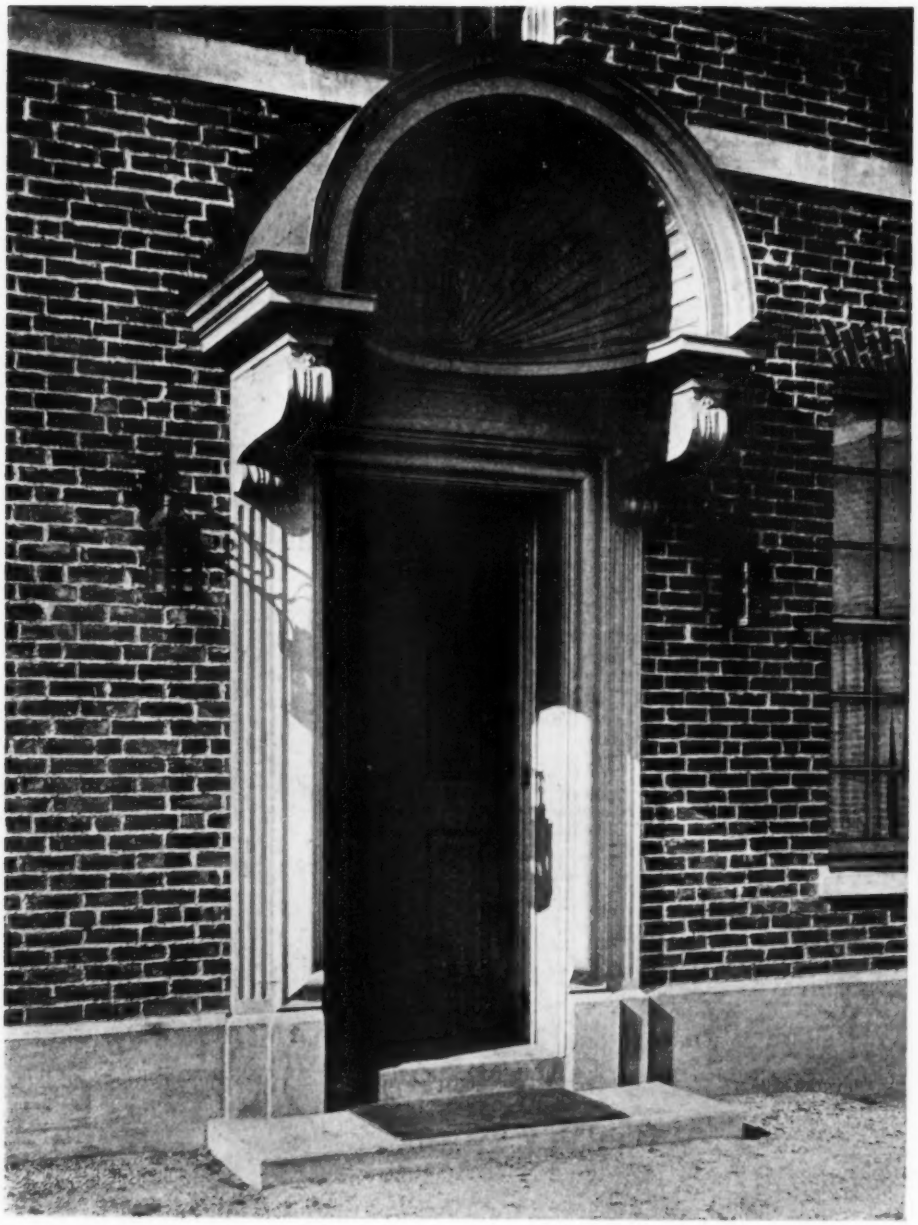
DRAWING ROOM. RESIDENCE OF
J. C. WISE, ESQ., WESTHAM, VA.

RESIDENCE OF ERNEST P. DAVIES, ESQ., ROSLYN, LONG ISLAND, N. Y.

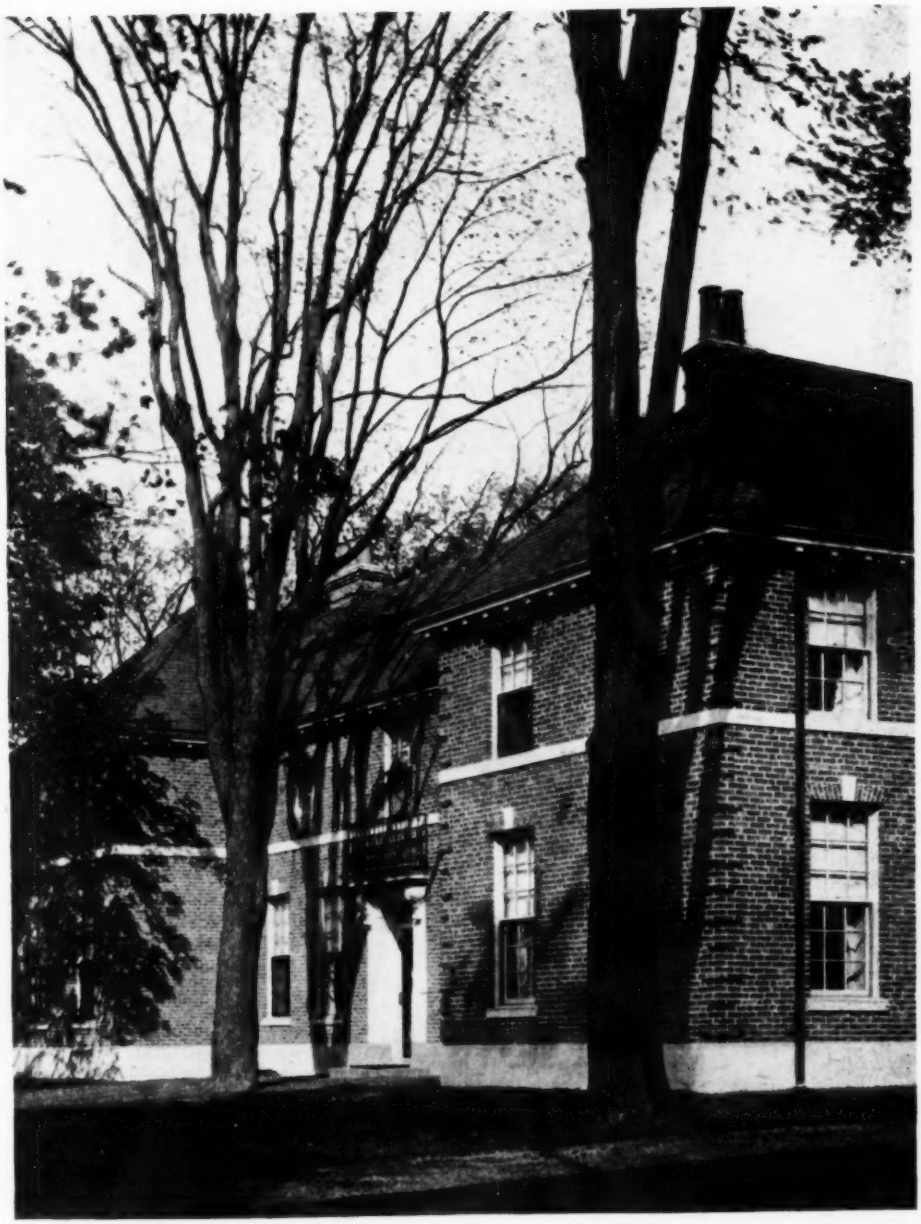
RESIDENCE OF ERNEST P. DAVIES, ESQ., ROSLYN, LONG ISLAND, N. Y.

RESIDENCE OF ERNEST P. DAVIES,
ESQ., ROSLYN, LONG ISLAND, N. Y.

LIBRARY — RESIDENCE OF ERNEST P. DAVIES, ESQ., ROSLYN, LONG ISLAND, N. Y.



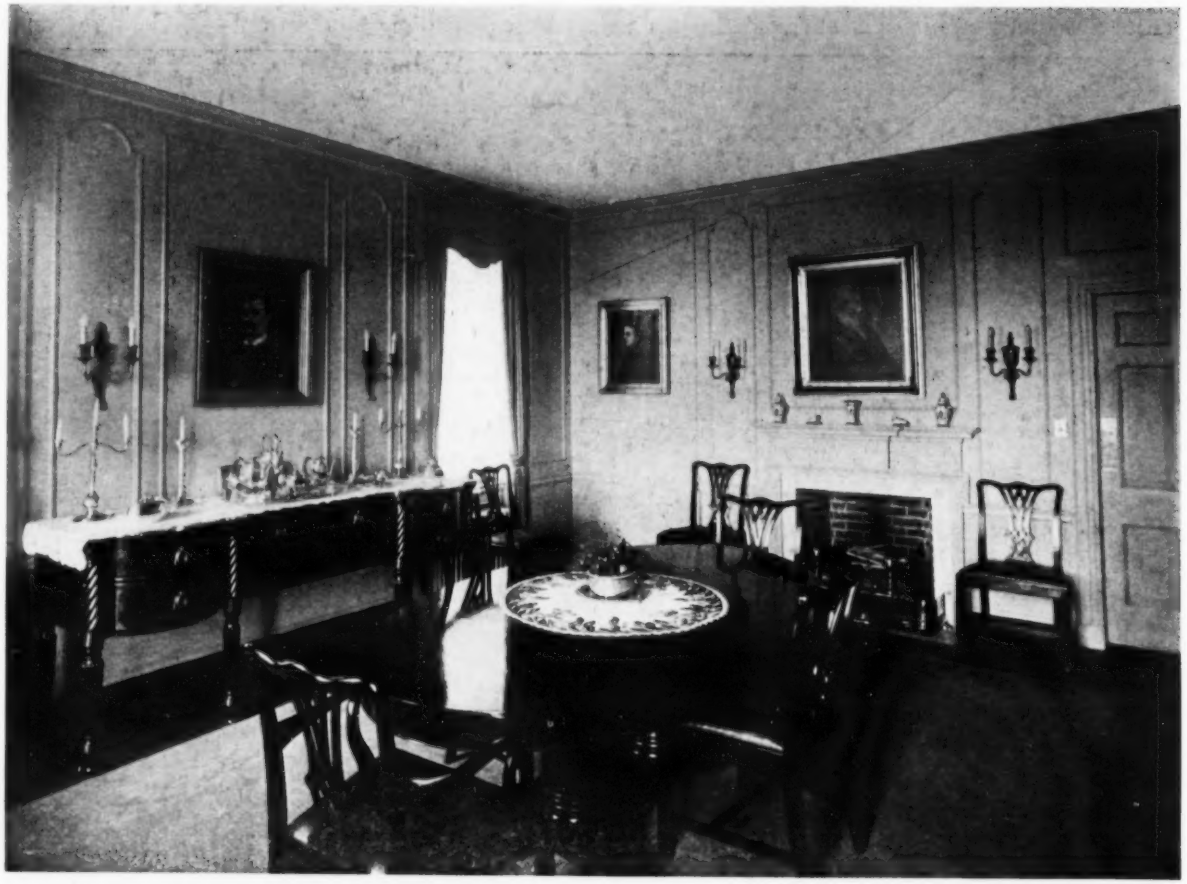
DOORWAY—RESIDENCE OF WALTER G. DAVIS, ESQ., PORTLAND, MAINE.



RESIDENCE OF WALTER G. DAVIS, ESQ., PORTLAND, MAINE.

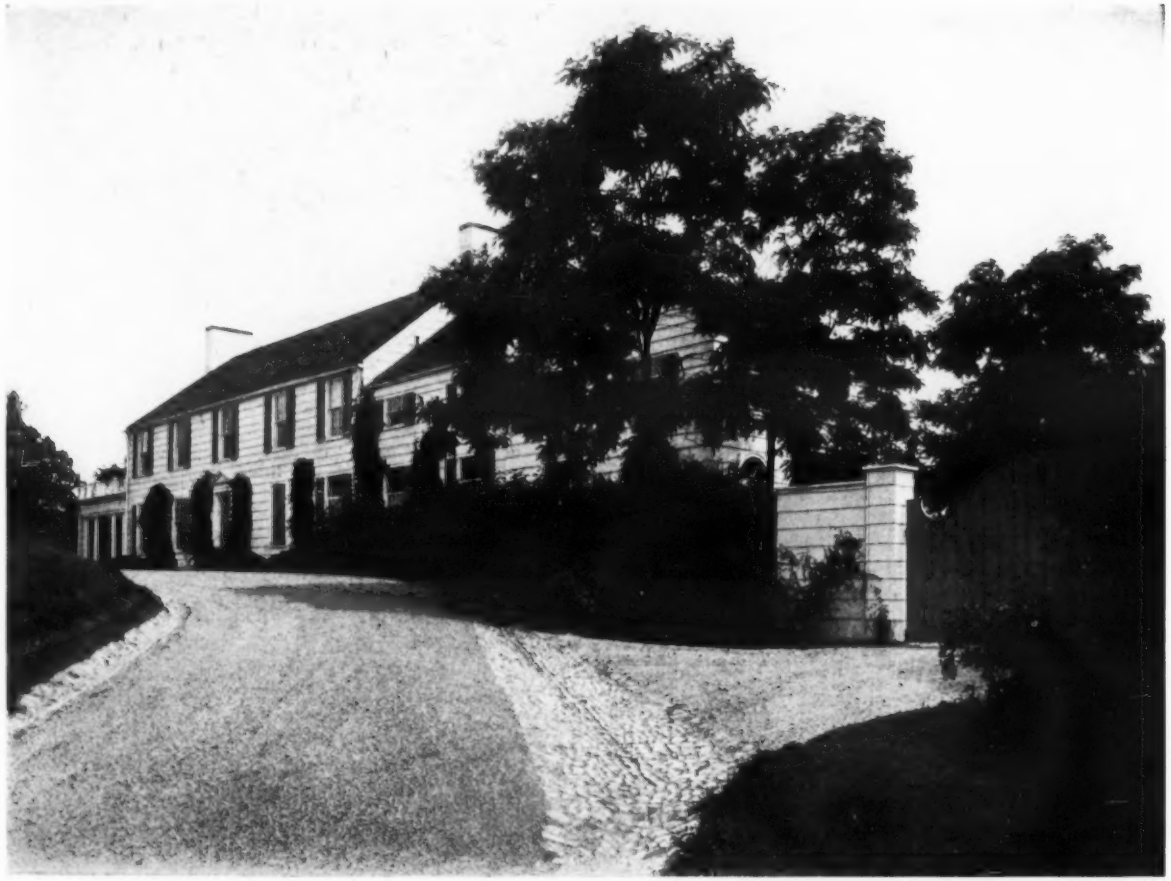
LIBRARY—RESIDENCE OF WALTER G. DAVIS, ESQ., PORTLAND, MAINE.

DRAWING ROOM—RESIDENCE OF WALTER G. DAVIS, ESQ., PORTLAND, MAINE.



DINING ROOM—RESIDENCE OF WALTER G. DAVIS, ESQ., PORTLAND, MAINE.

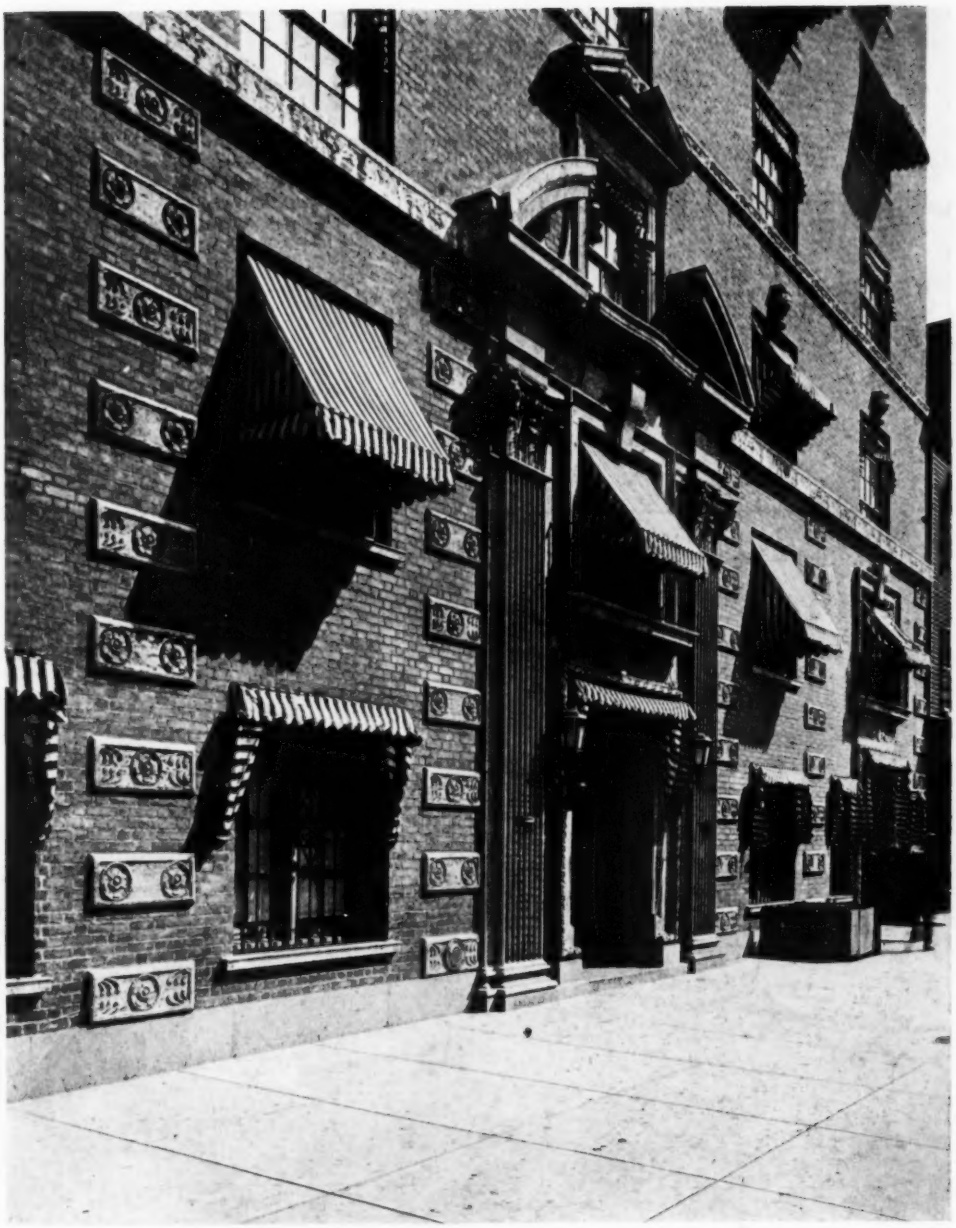
DOORWAY. RESIDENCE OF FARIS RUSSELL, ESQ., MILL NECK, LONG ISLAND, N. Y.



RESIDENCE OF FARIS RUSSELL, ESQ.,
MILL NECK, LONG ISLAND, N. Y.

GARDEN WALK—RESIDENCE OF FARIS RUSSELL, ESQ., MILL NECK, LONG ISLAND.

RESIDENCE OF FARIS RUSSELL, ESQ.,
MILL NECK. LONG ISLAND, N. Y.



DETAIL OF ENTRANCE. APARTMENT HOUSE,
NO. 1049 PARK AVENUE, NEW YORK CITY.

APARTMENT HOUSE. NO. 1049
PARK AVENUE, NEW YORK CITY.

girders, each unit of the construction as nearly a square as possible in plan, piled one on another for twelve or fourteen stories. Inside of this, the partitions of the rooms and corridors are worked in, and the exterior is a wall (supported at each floor) which has no value as a support, but merely encloses the interior and protects the steel frame. There is, therefore, no logical reason for expressing a sense of support in this wall, and it may well be treated in a purely decorative way.

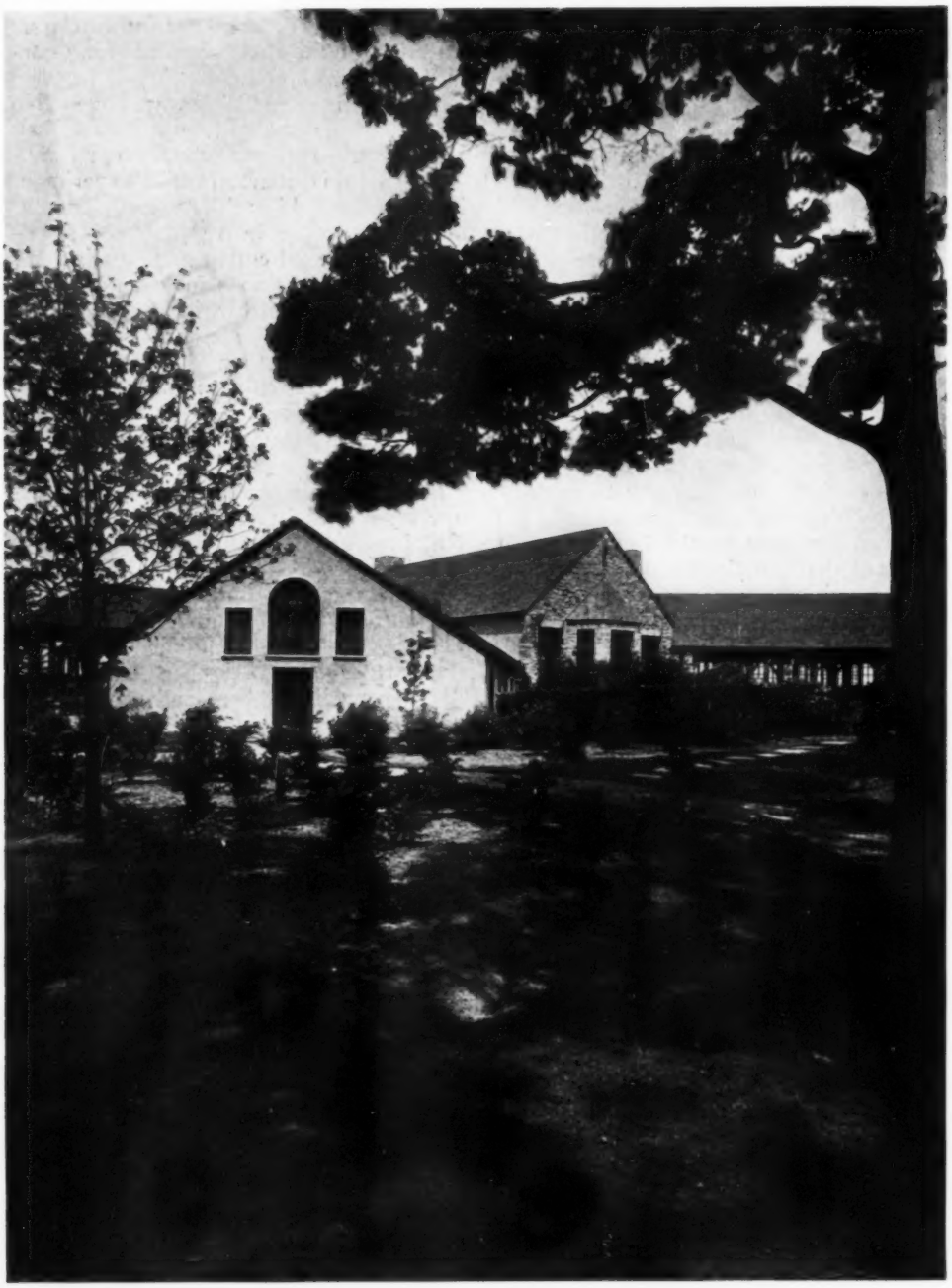
This has been the treatment at 1049 Park Avenue. Strong horizontal lines form the three main divisions of the façade, namely: (1) A rich base with strongly decorative treatment of the three doorways, two leading to doctors' private suites and the central one being the main entrance to the building; (2) the main shaft of the building, perfectly plain, which contrasts and brings out the rich treatment of the base and the upper stories. (3) the top of the building treated with great panels of carved stone set into the brick on the principle of a mosaic.

The building, contrary to almost all previous precedent, has no strong cornice, but the sky line is broken by finials in the form of candelabra at the sides and corners. Decoration is sparingly used, but counts strongly where it is employed. It is classic in feeling, modern in its use, and is influenced by the Spanish tradition. It is bold, strong in modelling and interesting in design. The color is soft red brick relieved by the warm buff-colored, traventino decoration.

The distinction of this from most of the great apartment houses in New York, both on Park and Fifth Avenues as well as on the West Side, is that these buildings are almost all crowned with heavy projecting cornices of stone, terra cotta, or metal—great shelves that have no meaning, and are merely conventional repetitions in deference to the classic tradition of the necessary crowning cornice.

Tradition we must always have. No art is more necessarily traditional than architecture, and perhaps the chief reason is that it is an art in which experiment is expensive. If architecture is discernably more conservative than painting—if its schools and cults pursue each other across the generations in less rapid succession—it is probably, in large part, for the reason that stage conventions are more persistent than literary conventions; because architects and playwrights practice an expensive art, and the pressure upon the builder of buildings and the producer of plays to "play safe" is relatively greater. It takes more courage for an architect to risk a single large building—as Mr. Bottomley has done—that breaks with the tradition of the cornice, than for a painter to risk a single canvas that breaks some tradition of the ateliers. It would be difficult to name any art which carries, as architecture does, so many features and peculiarities, whose original reasons long ago ceased to exist and are now hardly more than conjectural.

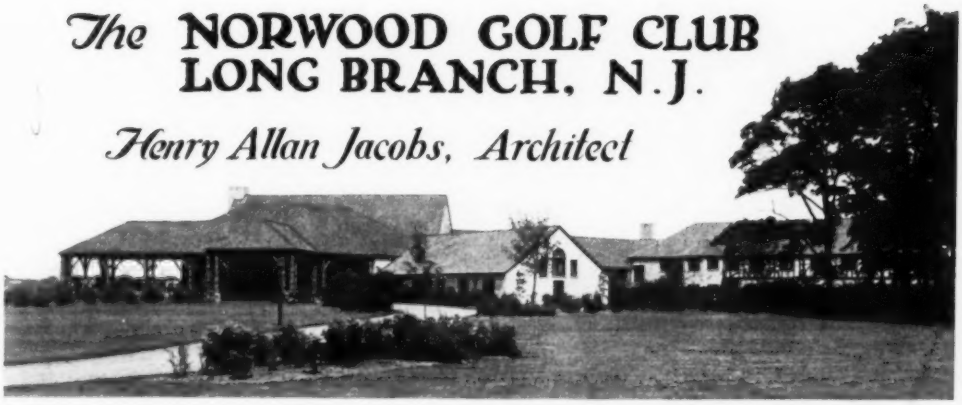
The elimination of the cornice from high buildings in New York would have other than the merely logical advantages. It would allow more light to reach the obscure canyons below, and would probably help to soften the city's harsh and somewhat ragged skyline. With its many waters and varied shores, its hills and islands, its stately river and the long line of its western cliffs (so lofty and yet so level, so stern and yet so quiet) New York should be a beautiful city by a logic in art as strict as the logic in economics by which it has become an immense city. Doubtless it will be, when Time has had time to think it out. In the meanwhile all contributions are welcome which look to that end.



VIEW FROM GROVE—NORWOOD GOLF CLUB, LONG BRANCH, N. J. HARRY ALLAN JACOBS, ARCHITECT.

The NORWOOD GOLF CLUB LONG BRANCH, N.J.

Henry Allan Jacobs, Architect



THE expansion of the golf club through accretion of new functions —its development into a social center for outdoor life—has opened up interesting architectural possibilities. The diversity of the club membership attracted by golf makes for diversity of social and recreational activities, many of which demand particular housing arrangements, generally on the ground floor. A low building of considerable extent is therefore normally required—a physical condition lending itself to individuality of architectural treatment.

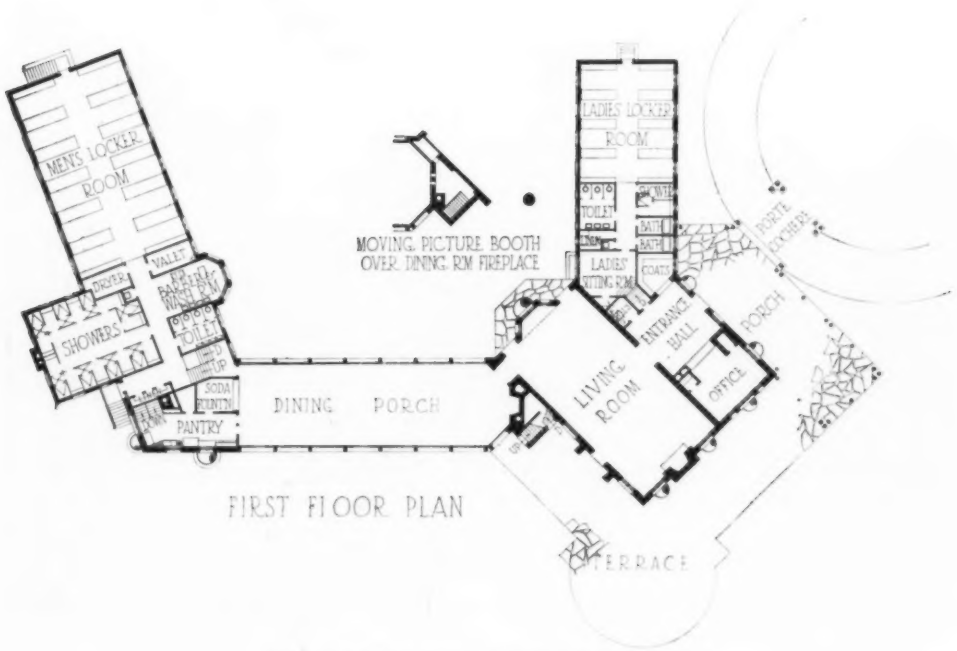
The Norwood Golf Club is in the shape of an irregular "U," framing three sides of a sunken lawn; the uninclosed side is bordered by a fine grove of trees. This arrangement invited the adoption of an informal design based upon English tradition, with a mixture of rough stone, stucco, and half-timber. The picturesque exterior has been brought about naturally by a practical and honest plan, the rooms being so grouped that they have proper relation to each other. The rustic timbers for the porches and the dining room, cut in the woods near-by, are soft in character and blend readily with the stone and stucco.

A herbaceous planting of the sunken lawn, designed by Mrs. Annette Flanders, in association with Vitale, Brinckerhoff & Geiffert, has the charm of color throughout the year, and the garden is a center of use and interest. On pleasant nights a movable platform is placed in it for dancing. Colored Japanese lanterns are hung around the perimeter of the U-shaped building, and, with musicians screened behind palms, the garden takes on an exotic aspect.

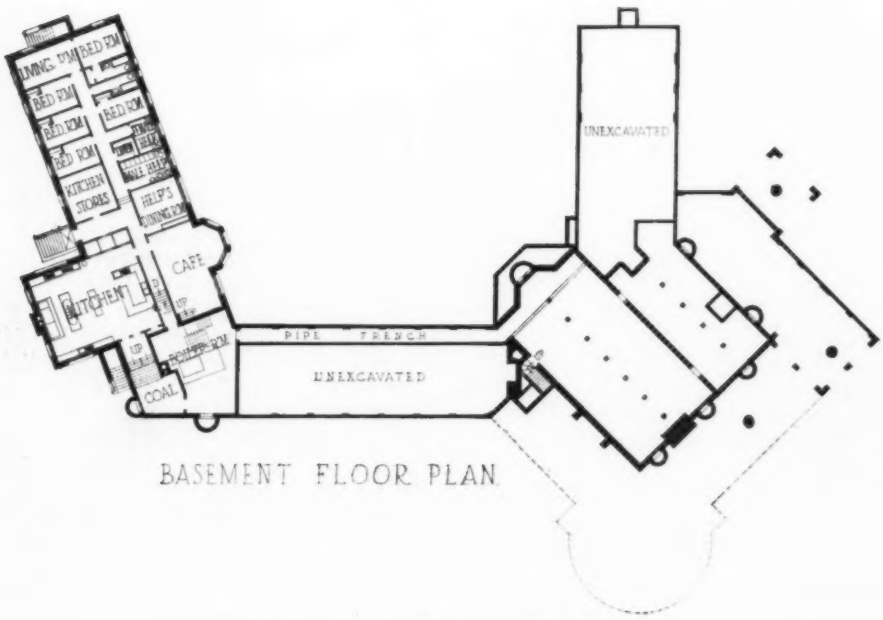
The introduction of an unwrought material in the form of rustic posts into the more formal materials of stone, stucco, and half timber gives a pleasing result. In all the rooms advantage has been taken of the full ceiling height by exposing the roof construction into the room itself; no ceilings have been furred down, with the exception of that in the ladies' reception room. The walls are of sand finish plaster, which architects and decorators are beginning to appreciate as a decorative background. Its softness and atmospheric quality give distance to the walls—one never feels that they are closing in upon one. Besides, it is a background which can be used for almost any type of architecture and is particularly happy for the English, Spanish, and Italian styles.

The living room, thirty feet by fifty, is amply large for a dance. The dining room is so situated as to have a view of the garden on one side and the golf course on the other. Prohibition being in force, a soda fountain takes the place of the obsolete bar.

The dining room is designed with rustic posts. At one end is a high fireplace made of rubble stone; at the other are the entrance to the pantry, and the soda fountain. The windows on either side give free circulation of air, so that one



NORWOOD GOLF CLUB, LONG BRANCH, N. J.
Harry Allan Jacobs, Architect.



NORWOOD GOLF CLUB, LONG BRANCH, N. J.
Harry Allan Jacobs, Architect.

CLUB AND PROFESSIONAL HOUSE—NORWOOD GOLF CLUB, LONG BRANCH, N. J.
Harry Allan Jacobs, Architect.

VIEW OVERLOOKING LINKS—NORWOOD GOLF CLUB, LONG BRANCH, N. J.
Harry Allan Jacobs, Architect.

END OF MEN'S LOCKER ROOM—NORWOOD GOLF CLUB, LONG BRANCH, N. J. HARRY ALLAN JACOBS, ARCHITECT.

CENTRAL GARDEN COURT—NORWOOD GOLF CLUB, LONG BRANCH, N. J. HARRY ALLAN JACOBS, ARCHITECT.

LIVING ROOM—NORWOOD GOLF CLUB, LONG BRANCH, N. J. HARRY ALLAN JACOBS, ARCHITECT.

ENTRANCE HALL—NORWOOD GOLF CLUB, LONG BRANCH, N. J. HARRY ALLAN JACOBS, ARCHITECT.

LIVING ROOM FIREPLACE—NORWOOD GOLF CLUB, LONG BRANCH, N. J. HARRY ALLAN JACOBS, ARCHITECT.

DINING ROOM—NORWOOD GOLF CLUB, LONG BRANCH, N. J. HARRY ALLAN JACOBS, ARCHITECT.

has a feeling of dining out of doors. The U-shaped garden, opening out upon a grove of fine trees, adds to the sense of airiness and spaciousness.

The appointments and services are most complete and modern. Every member has his own steel locker, one tier high. The showers are accompanied by individual dressing rooms and there are a valet room, dryer, barber shop, card room and café.

The ladies have correspondingly generous arrangements, including a comfortable reception room and a prinking room.

ENTRANCE TO MEN'S LOCKER ROOM, NORWOOD GOLF CLUB, LONG BRANCH, N. J.
Harry Allan Jacobs, Architect.

Portfolio of Current Architecture

1. Sanctuary Lamp, Chapel Screen, and Friars' Chapel in Church of St. Vincent Ferrer, New York: Bertram G. Goodhue, Architect.

2. Post Office and Stores, Upper Montclair, N. J.: Francis A. Nelson, Architect.

3. Packard Motor Car Service Building, Chicago, Ill.: Albert Kahn, Architect.

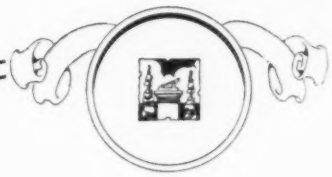
4. National State Bank, Elizabeth, N. J.: Dennison & Hirons, Architects.

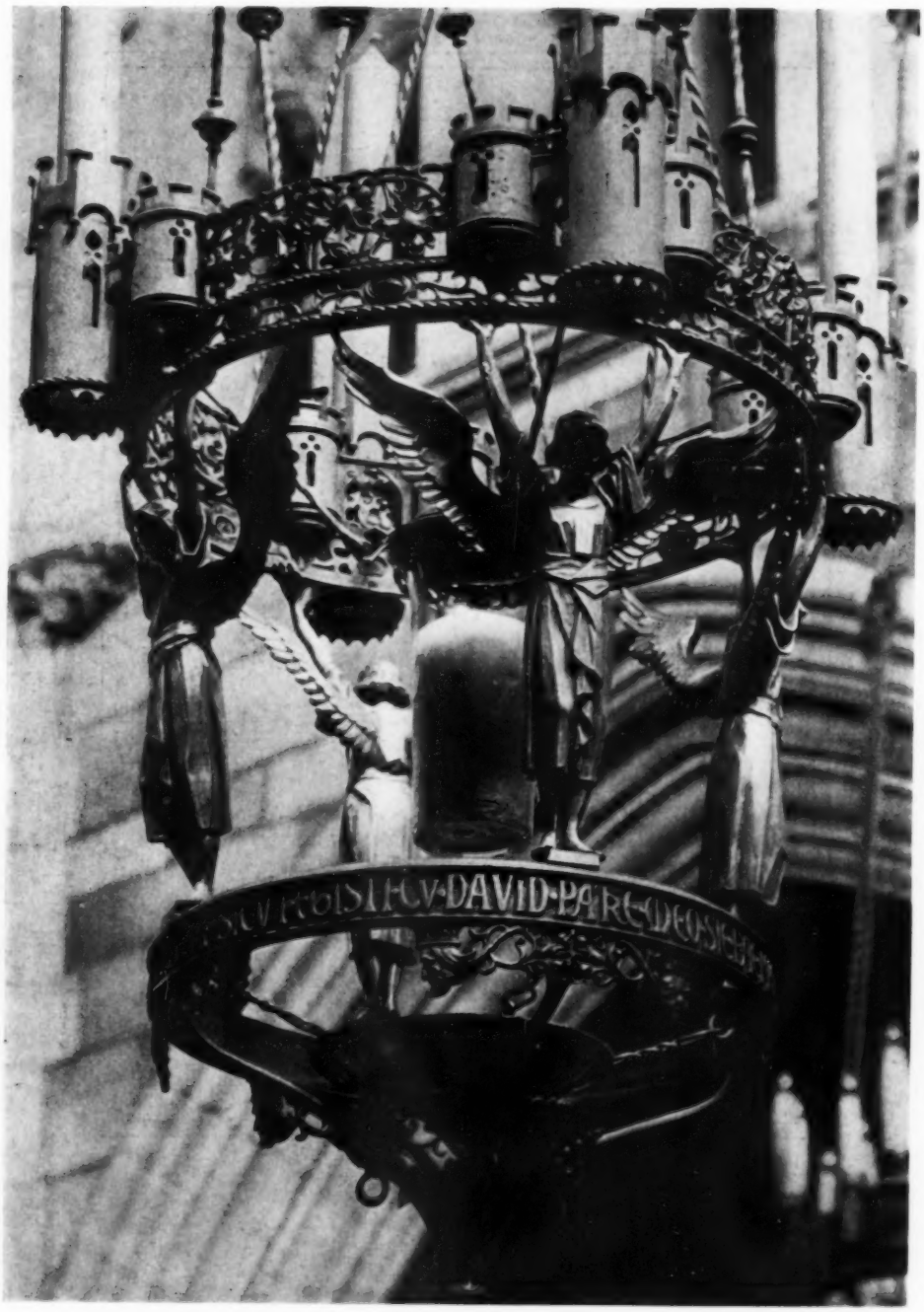
5. Suburban Residence, Mt. Kisco, N. Y.: Aymar Embury II, Architect.

6. Music Studio, Upper Montclair, N. J.: Francis A. Nelson, Architect.

7. The Bible House, New York: Wilfred E. Anthony, Architect.

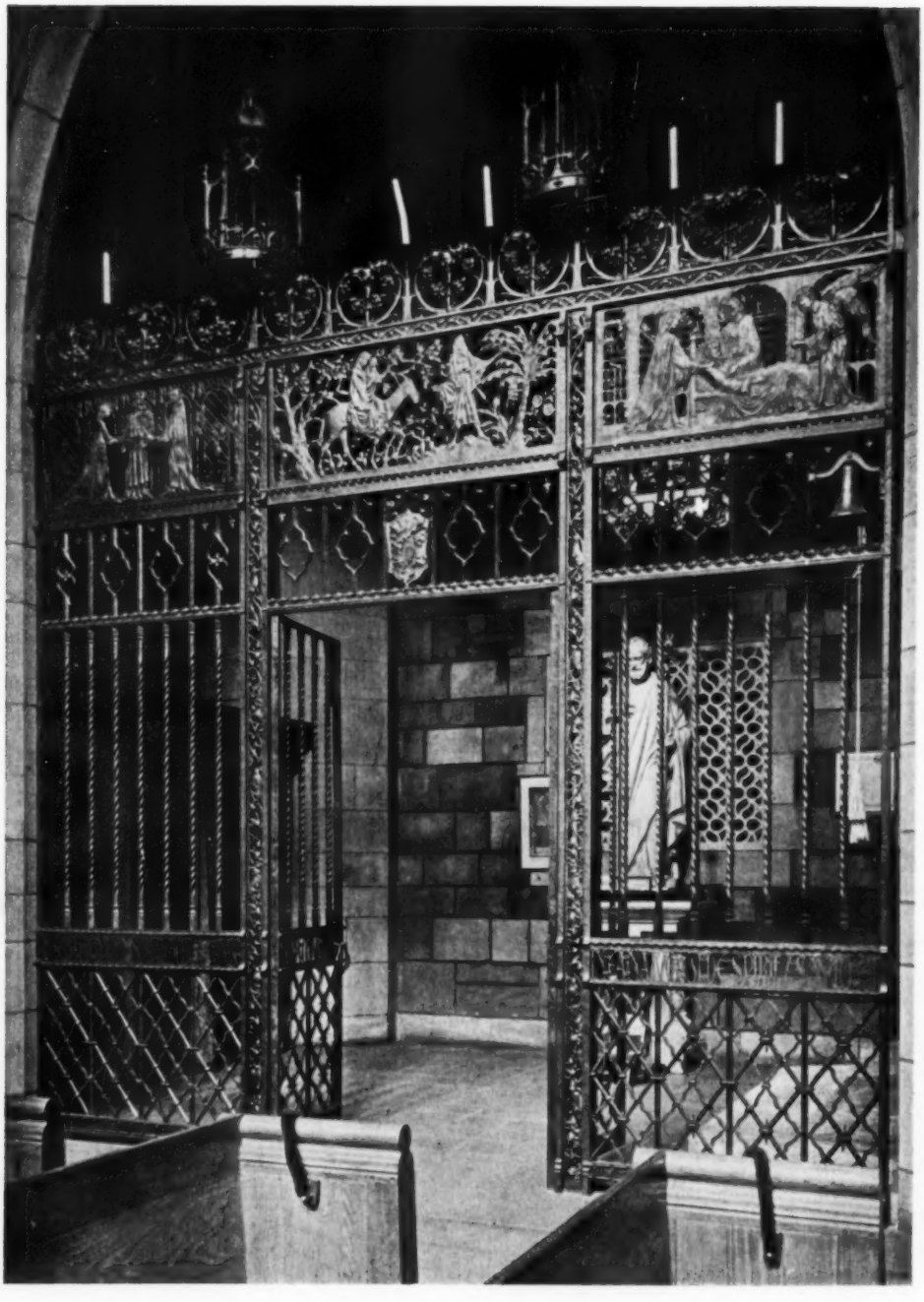
8. City Residence, New York: Frederick Sterner, Architect.



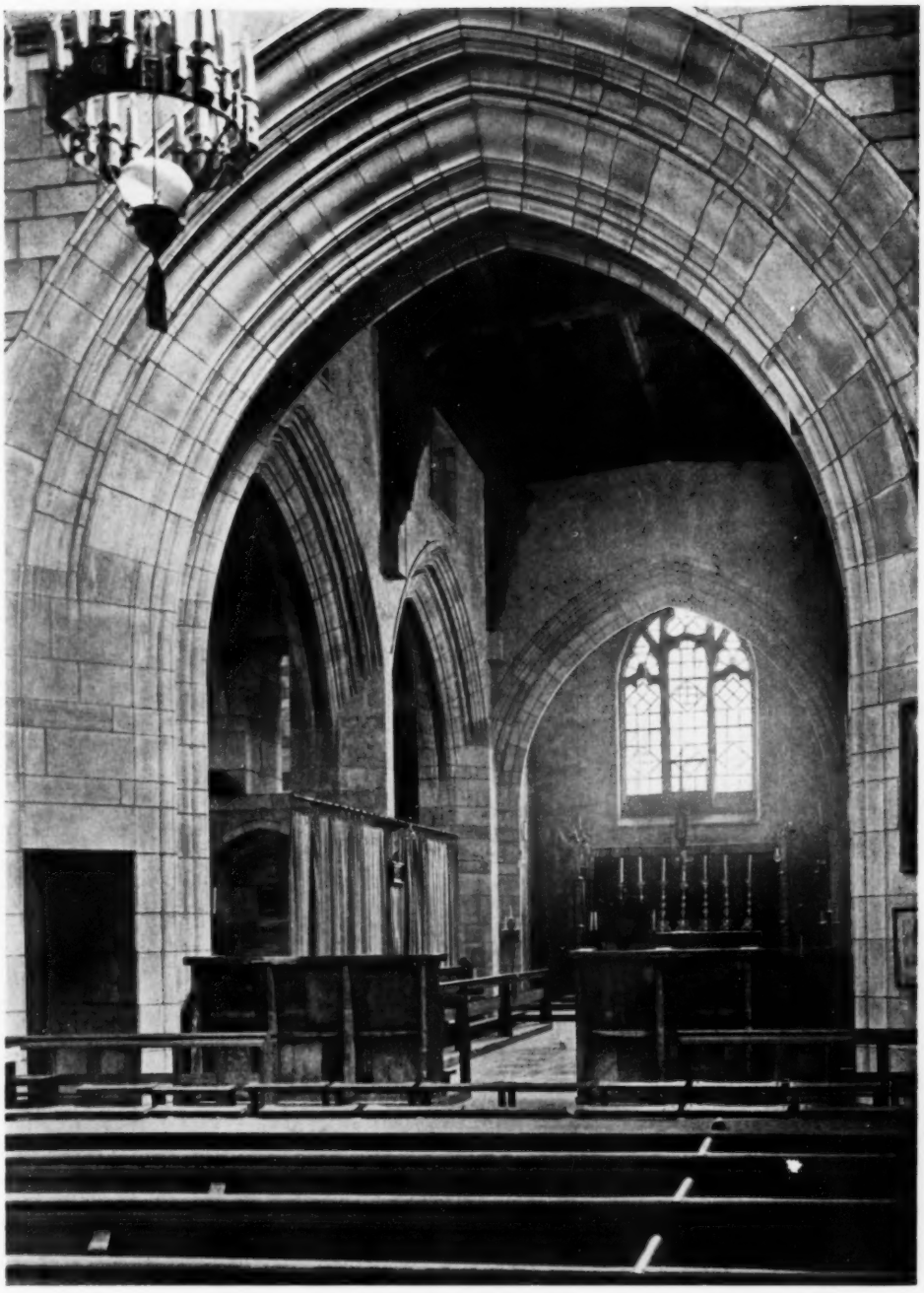


MAIN SANCTUARY LAMP—CHURCH OF ST. VINCENT FERRER, NEW YORK CITY. BERTRAM G. GOODHUE, ARCHITECT.

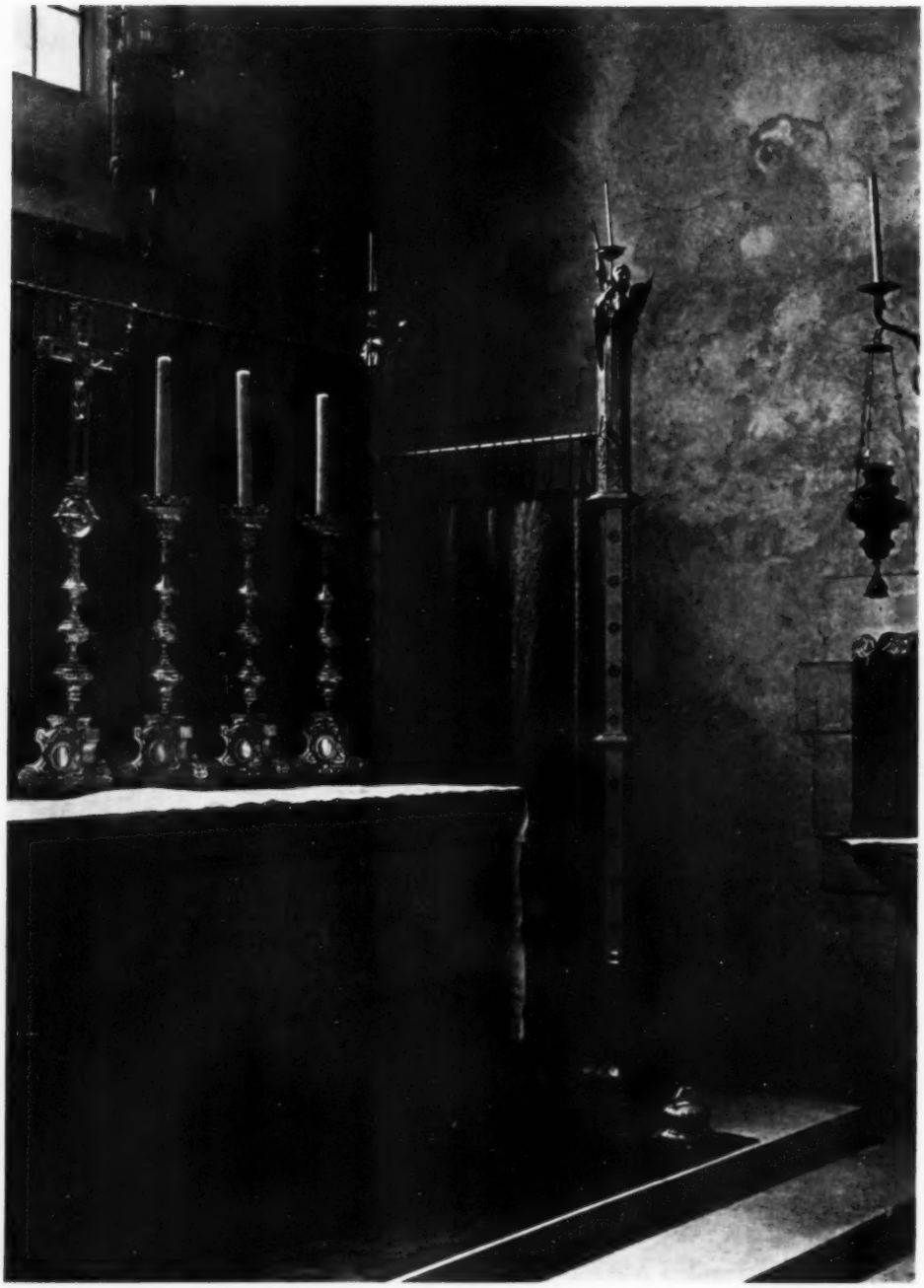
VIEW THROUGH NARTHEX WINDOW—CHURCH OF ST. VINCENT FERRER, NEW YORK CITY. BERTRAM G. GOODHUE, ARCHITECT.



SCREEN: ST. JOSEPH'S CHAPEL—CHURCH OF ST. VINCENT FERRER, NEW YORK CITY. BERTRAM G. GOODHUE, ARCHITECT.



FRIARS' CHAPEL, CHURCH OF ST. VINCENT FERRER, NEW YORK CITY. BERTRAM G. GOODHUE, ARCHITECT.

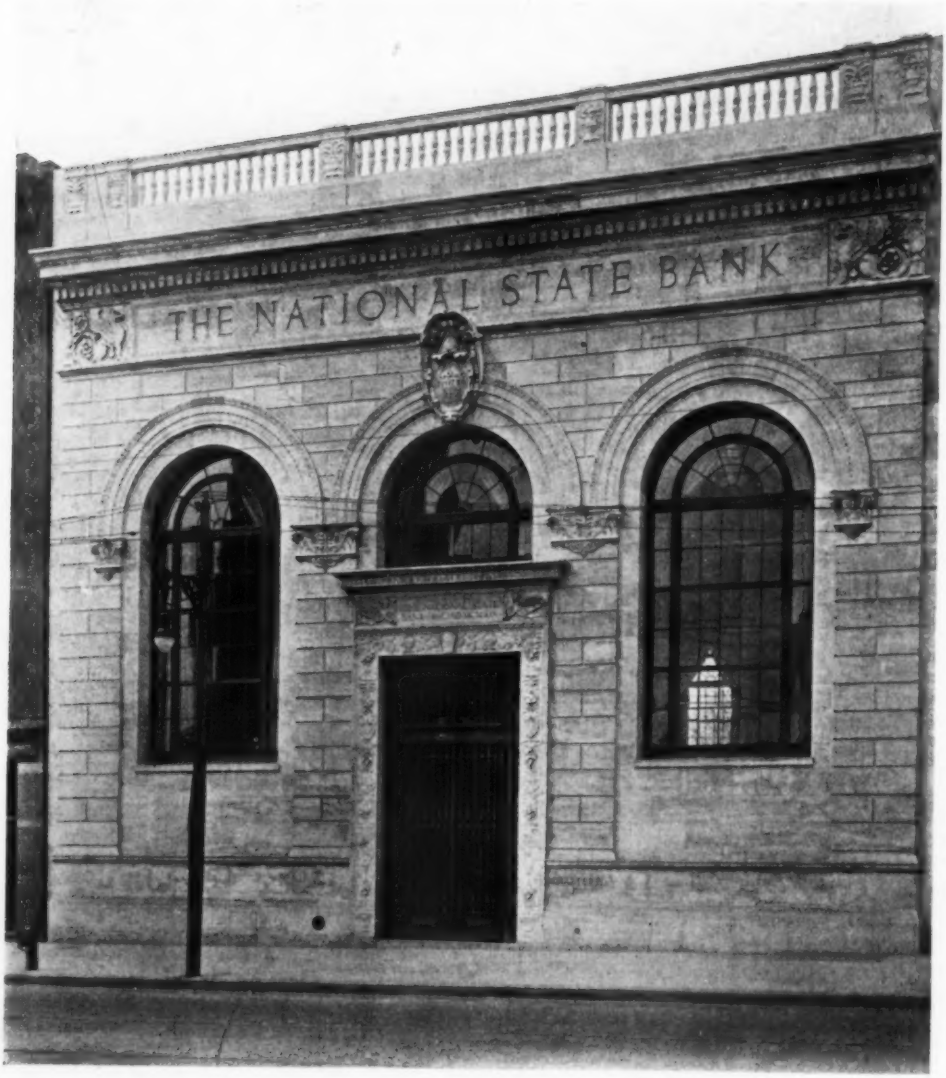


ALTAR IN FRIARS' CHAPEL—CHURCH OF ST. VINCENT FERRER, NEW YORK CITY. BERTRAM G. GOODHUE, ARCHITECT.

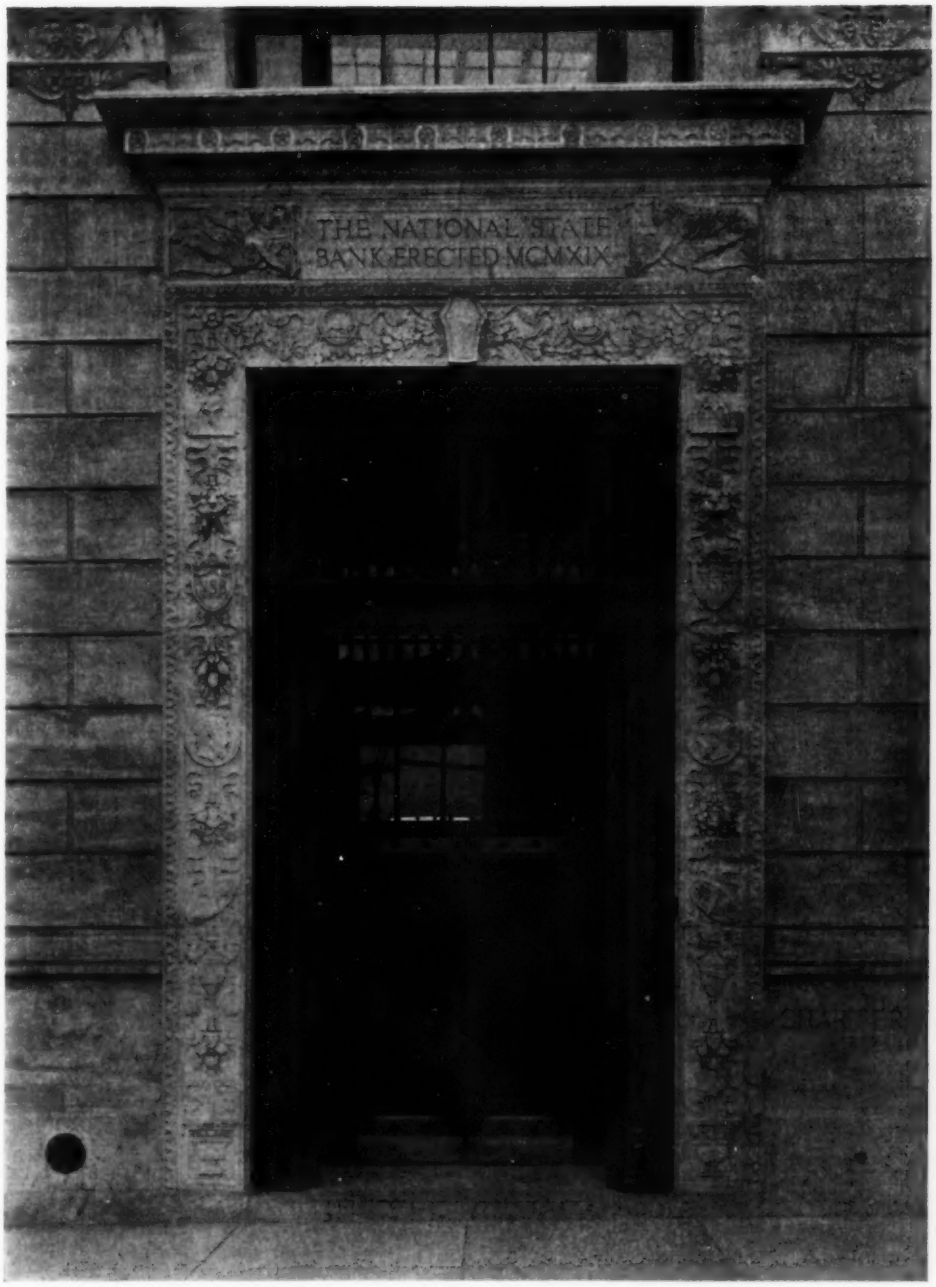
DETAIL OF POST OFFICE, UPPER MONTCLAIR, N. J. FRANCIS A. NELSON, ARCHITECT.

POST OFFICE AND STORES, UPPER MONTCLAIR, N. J. FRANCIS A. NELSON, ARCHITECT.

PACKARD MOTOR CAR SERVICE BUILDING,
CHICAGO, ILL. ALBERT KAHN, ARCHITECT.



ELEVATION OF NATIONAL STATE BANK, ELIZABETH, N. J. DENNISON & HIRONS, ARCHITECTS.



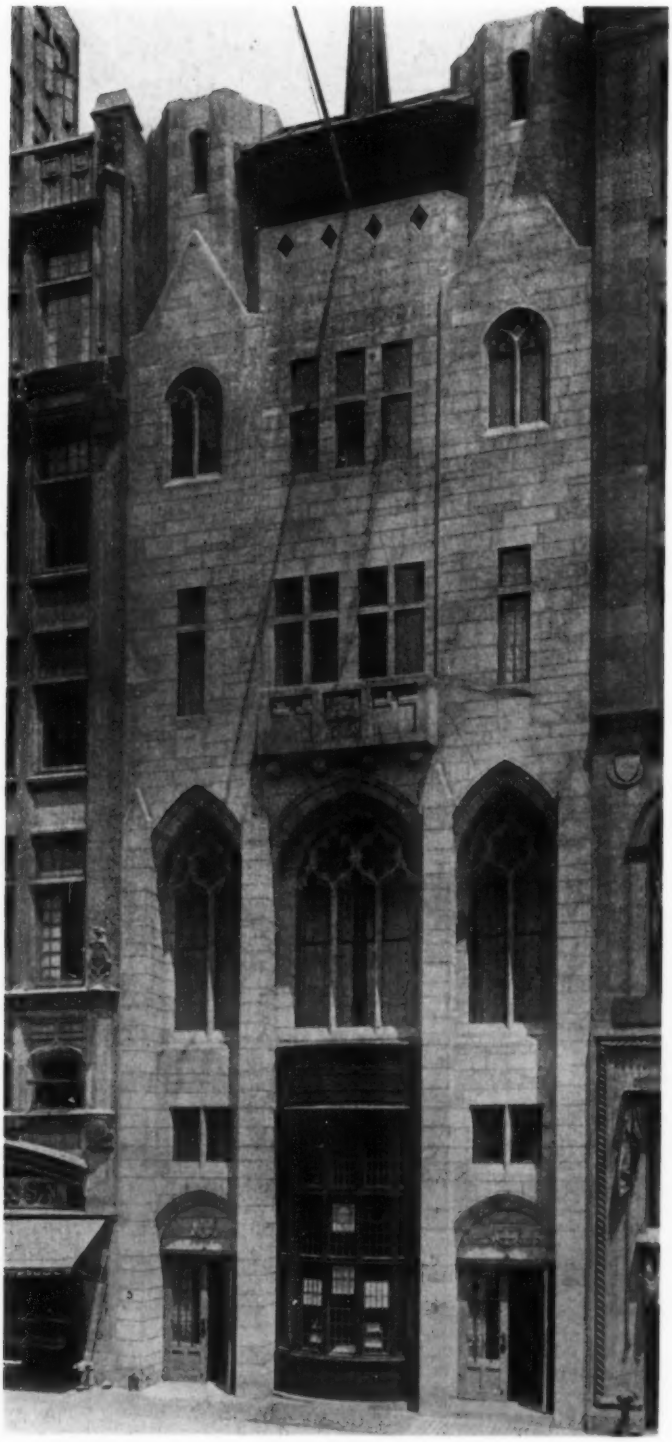
DETAIL OF DOORWAY — NATIONAL STATE BANK, ELIZABETH, N. J. DENNISON & HIRONS, ARCHITECTS.

BANKING ROOM—NATIONAL STATE BANK, ELIZABETH, N. J. DENNISON & HIRONS, ARCHITECTS.

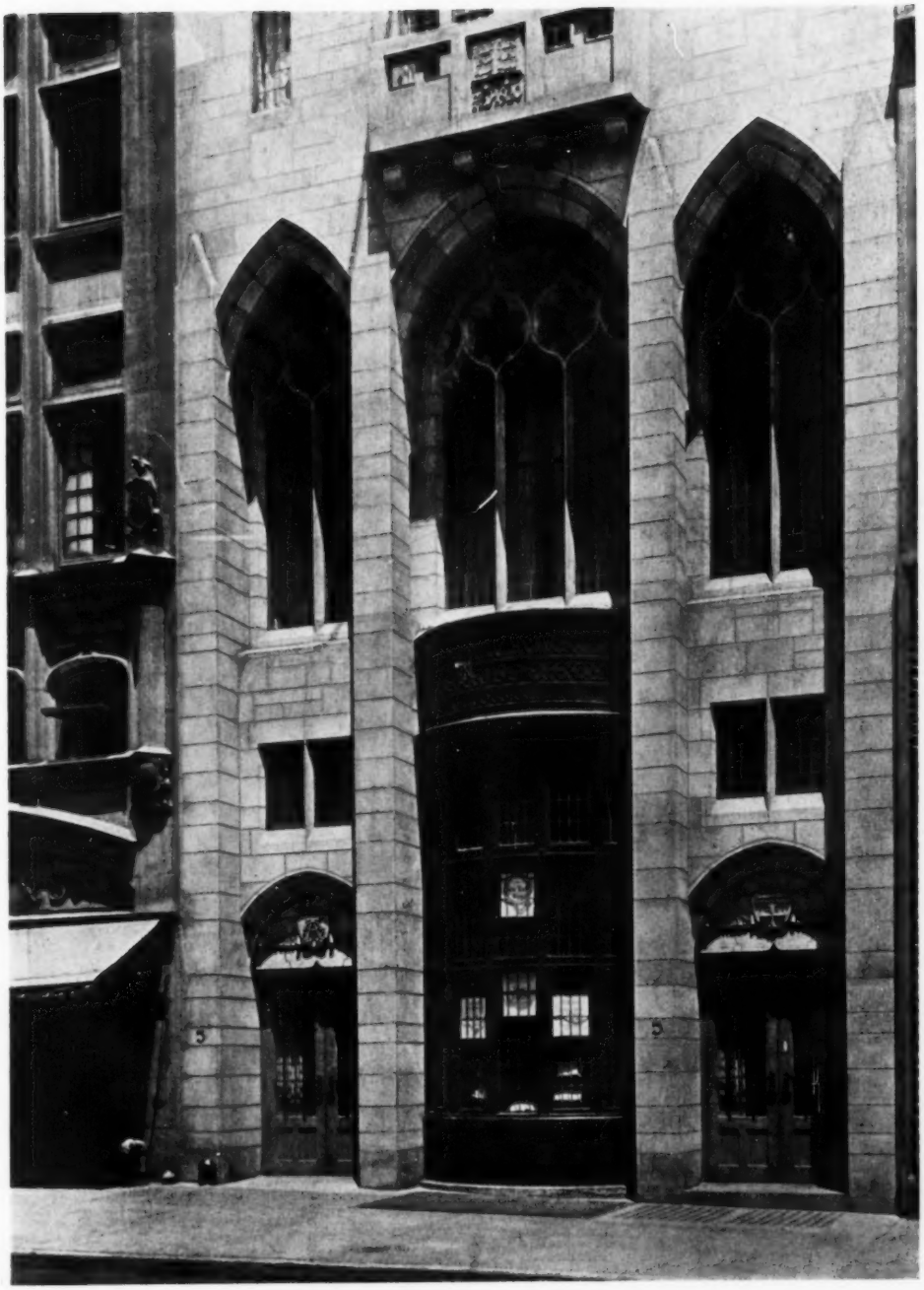
DETAIL OF HAAS HOUSE, MT. KISCO, N. Y. AYMAR EMBURY II, ARCHITECT.

GENERAL VIEW OF HAAS HOUSE, MT. KISCO, N. Y. AYMAR EMBURY II, ARCHITECT.

MUSIC STUDIO BUILDING, UPPER MONTCLAIR, N. J. FRANCIS A. NELSON, ARCHITECT.

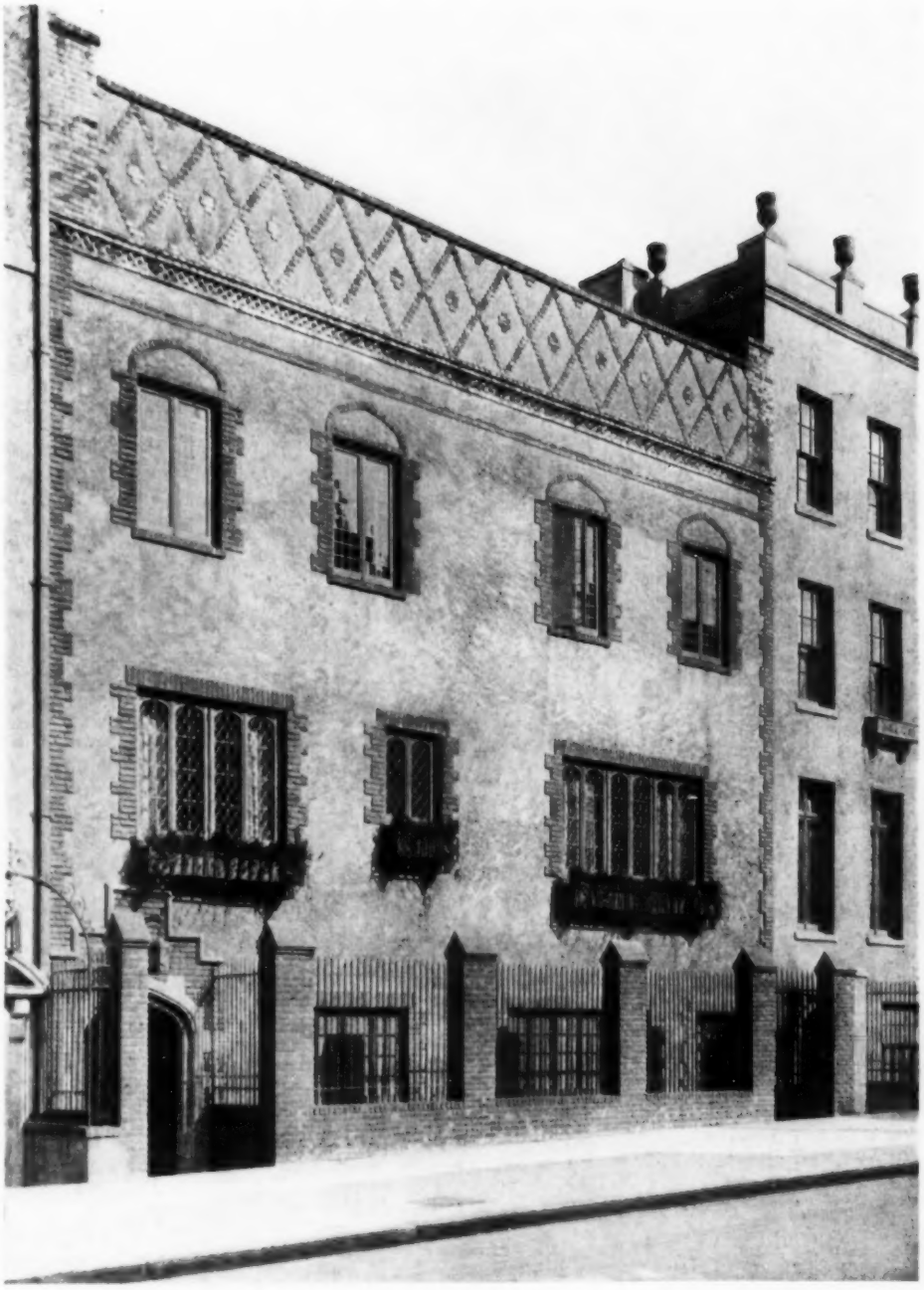


THE BIBLE HOUSE,
NEW YORK CITY.
WILFRED E.
ANTHONY,
ARCHITECT.

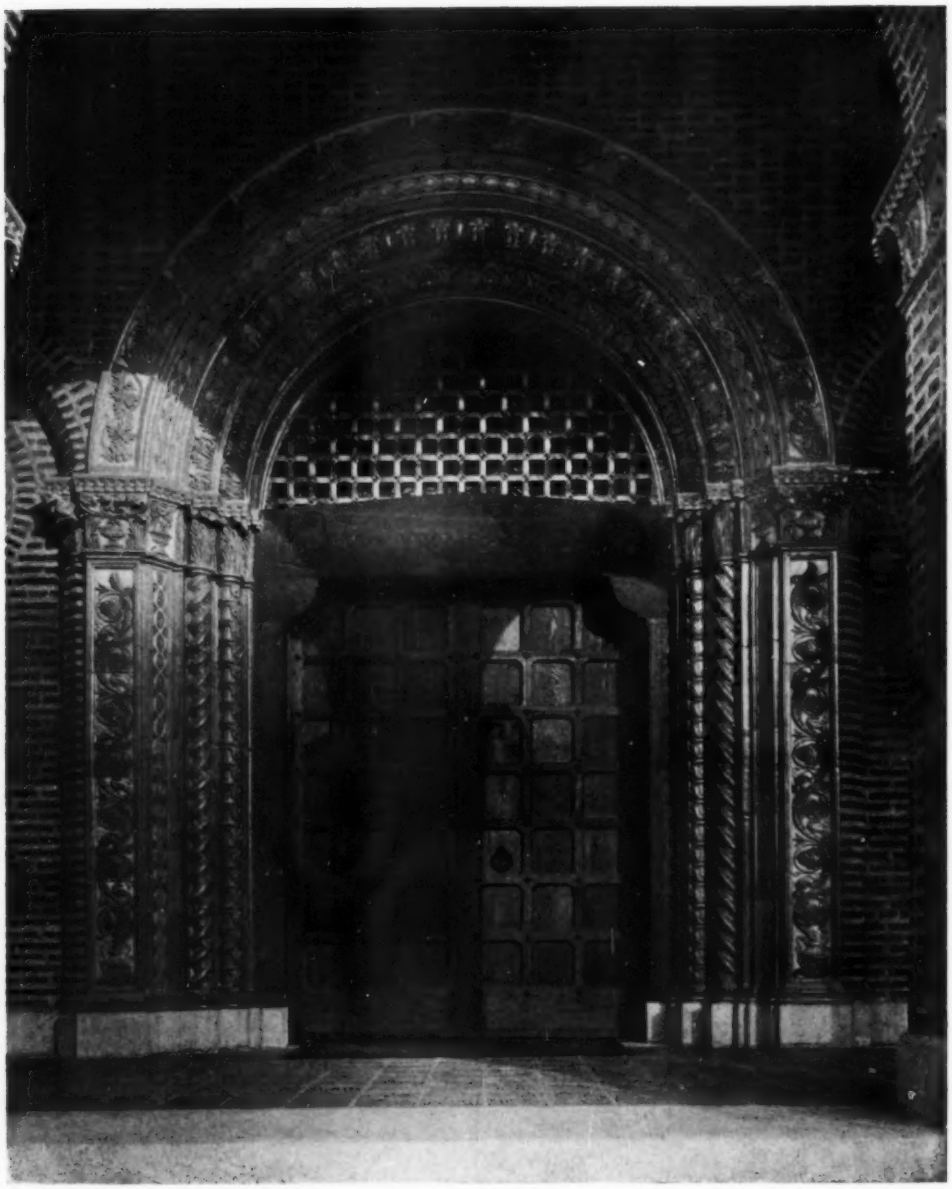


DETAIL OF THE BIBLE HOUSE, NEW YORK CITY. WILFRED E. ANTHONY, ARCHITECT.

INTERIOR—THE BIBLE HOUSE, NEW YORK CITY. WILFRED E. ANTHONY, ARCHITECT.



HOUSE ON EAST SIXTY-THIRD STREET, NEW YORK CITY. FREDERICK STERNER, ARCHITECT.



CHURCH DOOR—THE FIRST METHODIST EPISCOPAL CHURCH, ASBURY PARK, N. J. LUCIAN E. SMITH AND HARRY E. WARREN, ARCHITECTS.

The FIRST METHODIST EPISCOPAL CHURCH of ASBURY PARK, N. J.

Lucian E. Smith & Harry E Warren
Associated Architects

OWING to the importance of the sermon in the Methodist Church service, the plan for a church of this denomination should afford the largest possible unobstructed floor space so that the congregation as a whole may see and hear the preacher. From this basic idea the plan of the First Methodist Church of Asbury Park was developed, the domical-roofed building suggested and the elements of the style determined. Modern conditions and structural methods influenced the design, but the spirit of the Lombard Romanesque has in the main been adhered to, with some inspiration from the Romanesque detail and ornament of Southern France.

The fact that the church was to be built near the great brick and terra cotta producing districts of the State was the esthetic reason for the choice of these materials for the exterior, just as the Lombard builders chose brick because it was the material of their country.

Effort has been made to avoid a mechanical type of bond in the wall surfaces, and the brick itself ranges in color from a salmon pink to a deep purple. The wide mortar joint of buff tone serves to tie the color of the wall together, and owing to the variations in the color of the brick itself, the wall takes on different hues in different lights. The base of the building up to the stone table is of a very large brick, to give a stability of appearance. The brick above are of small size, which helps to increase the scale of the building.

The large triple windows are designed with free standing stone columns and crudely modeled foliated stone capitals. The central opening is wider and slightly raised above the side openings to make it a dominant in the triple motif. The five arched windows below serve to enhance the apparent size of the great triple windows above. Rich brick mosaic with marble inserts flank the windows, and the spaces above them are filled with brick mosaic in a carefully worked out design. Under each small arch of the crowning feature is a piece of rare colored marble set in the brickwork. The angle brick or tooth motif is used in the main cornice to give an interest in light and shade to this feature.

The south or choir end of the church is treated with an arcade. The brick arches contain pieces of marble skilfully utilized to fill up the wide joints occasioned by turning the arches with unground brick. A different type of brick mosaic is used above the arcade and choir windows. The small sections of wall in the arcade are slightly battered or sloped back to produce an interesting shadow. Small decorative crosses are formed of black brick in each opening.

The entrance porch serves as a dominant architectural feature of the façade. The splayed arches rest on richly modeled polychrome terra cotta capitals decorated with leaves, vases, birds and small gilded crosses. The bases of the octagonal piers are of stone. The interior walls of the porch above the arches are given a decorative interest by the use of a header bond in the brickwork, every alternate brick projecting beyond the face of the wall. The denticulated brick cor-

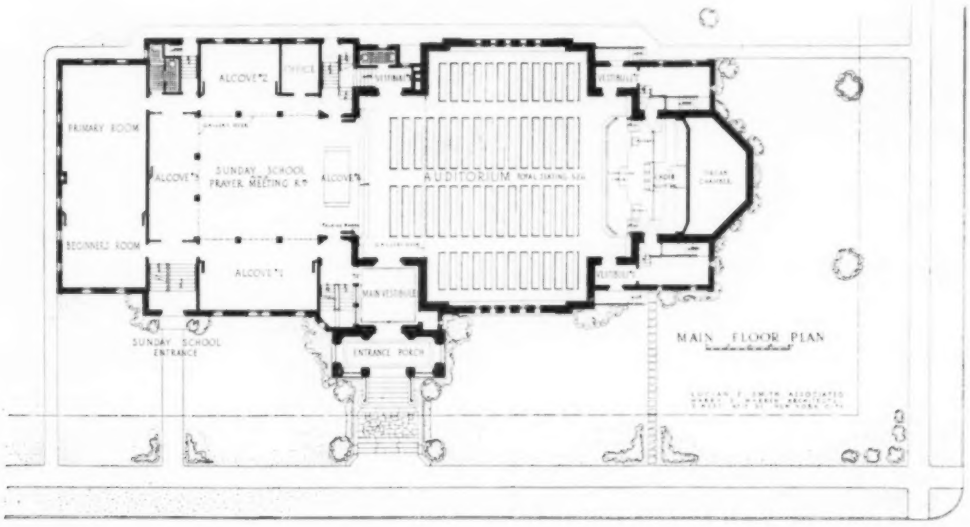
nice and mosaic frieze with its marble inserts and marble band serve, with the marble stars, to enrich the exterior of the porch.

Surmounting the dome is an octagonal turret of copper, designed with corner buttresses finishing in small pierced Greek crosses. The alternate openings are glazed and louvred—the louvres cut in a curved design. Surmounting the whole is a gilded finial with pierced ornaments and lights which shed a mystical glow over the surface of the dome at night.

The color and texture of the tile roof has been obtained by the use of a yellow tile, mixed with a darker tile and laid to produce an irregular effect.

The treatment of the Sunday School portion of the building has been kept low to give greater architectural value and size to the church proper, with its crowning dome. The windows are arched, the central windows being treated with the typical free standing stone colonette and arches.

The great simple expanses of wall on the exterior are the logical result of the structural requirements of the building. The thrusts exerted by the arches of the dome and by the pendentives require the walls to be of definite heights and weights, and from these purely practical premises the style has been developed. The walls are made interesting by their color and



texture, while the decoration has been concentrated and given full value in the richness of the porch motif, windows and doorways.

The main entrance doorway is of rich polychrome terra cotta, to harmonize with the general color tone of the surrounding brickwork. The ornament of the doorway is characteristic of the style, with running motif of leaves, grapes, birds and animals, twisted columns and columns bound with ropes. A peacock motif appears in colored terra cotta medallions on either side of the doorway.

SUNDAY SCHOOL ENTRANCE

The vestibule to the auditorium and the gallery has an arched treatment on the north, with twisted spindle grilles dividing the stair from the vestibule proper. The lunette over the door is richly modeled with an angel holding a scroll and having peacocks, signifying the Wisdom of God, on either side.

The dome is of the single shell type, built of thin, rough terra cotta slabs in horizontal rings which break joint one with the other. The structural shell of the dome is bound around with two steel rings, one at the base, and another one-third of the way up to the crown, to resist the outward thrusts developed by the weight of the dome and the turret which surmounts it.

The interior of the dome is lined with a sound-ab orbent material, of pumice stone and cement, modeled, cast and set in the form of tiles of fish scale design in fields divided by wide plaster bands ornamented with a running foliated motif of crude leaves and bunches of grapes.

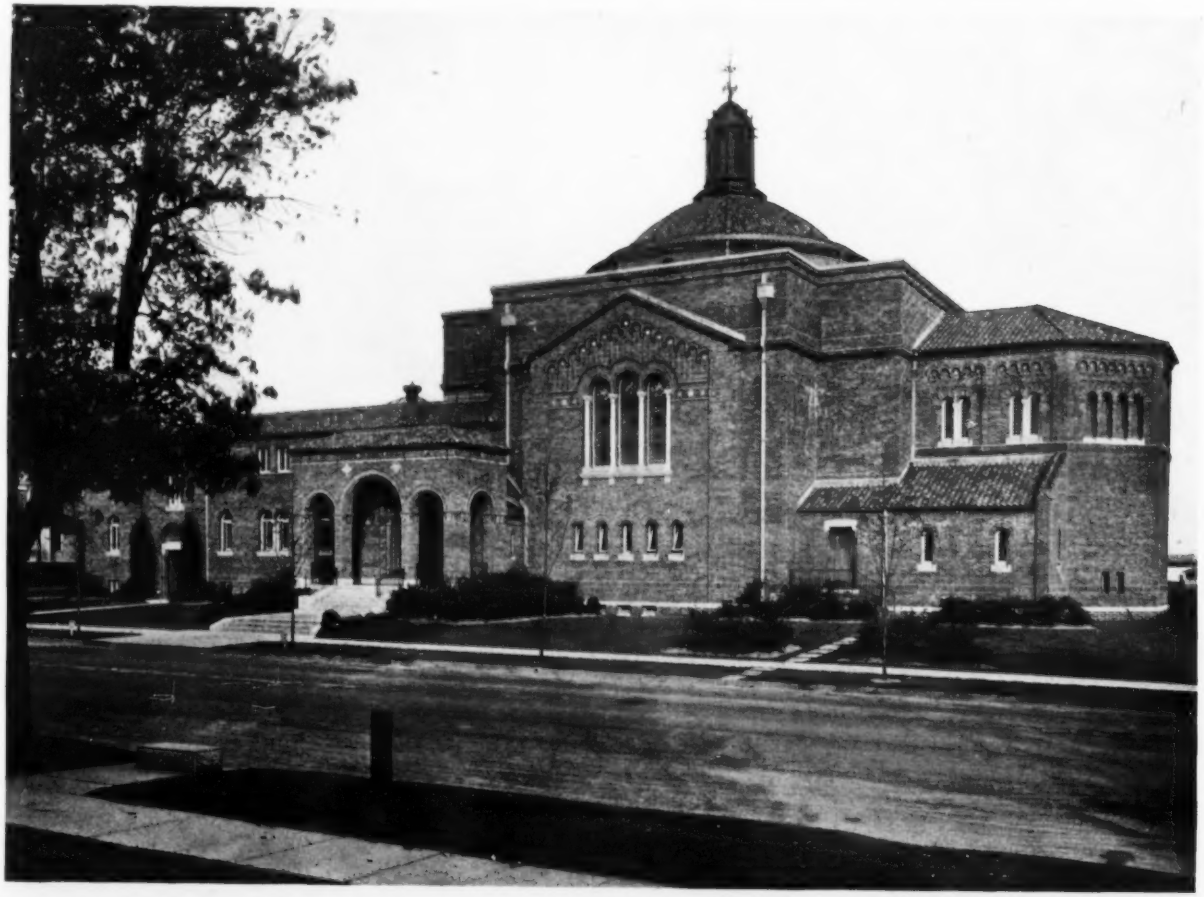
The rich cornice at the base of the spring line of the dome is de-igned with characteristic leaf motifs of different designs with alternating rosettes over large twisted rope molding; the whole surmounted by alternating cupids' heads and the doves with halos which symbolize the Holy Spirit.

The pendentives of the dome each contain a large circular medallion with bas-reliefs of the four Evangelists properly oriented, each with his usual symbol.

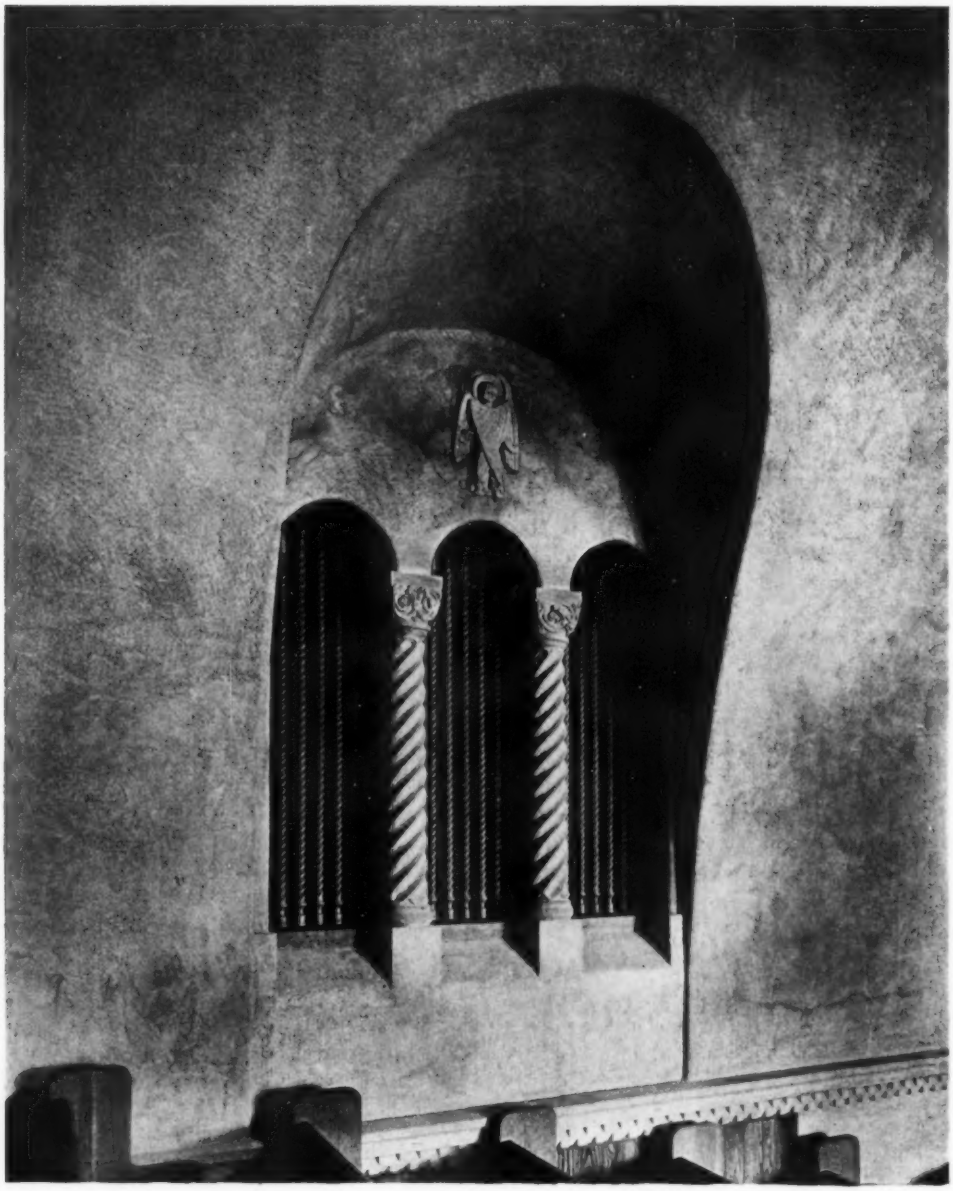
The medallions are surrounded by a running vine motif and the Venetian dentil. The decoration of the medallions of blue, gold and yellow-brown suggests the religious pictures and terra cottas of the style. The modelling has been kept purposely crude to simulate the early carving of the period. The vaults supporting the dome come down upon a small cornice ornamented with the Venetian dentil. The cornice is of slight projection so as not to break the line of the vaults from the floor.

The triple windows to the east and west with their columns and crudely modeled capitals resting on small corbels ornamented with anthemion motifs, are reminiscent of crude early work. The label molding has the diamond motif met with in many of the old windows and doorways. This molding is supported on corbels designed with the fish, which recalls the early Christian symbol denoting

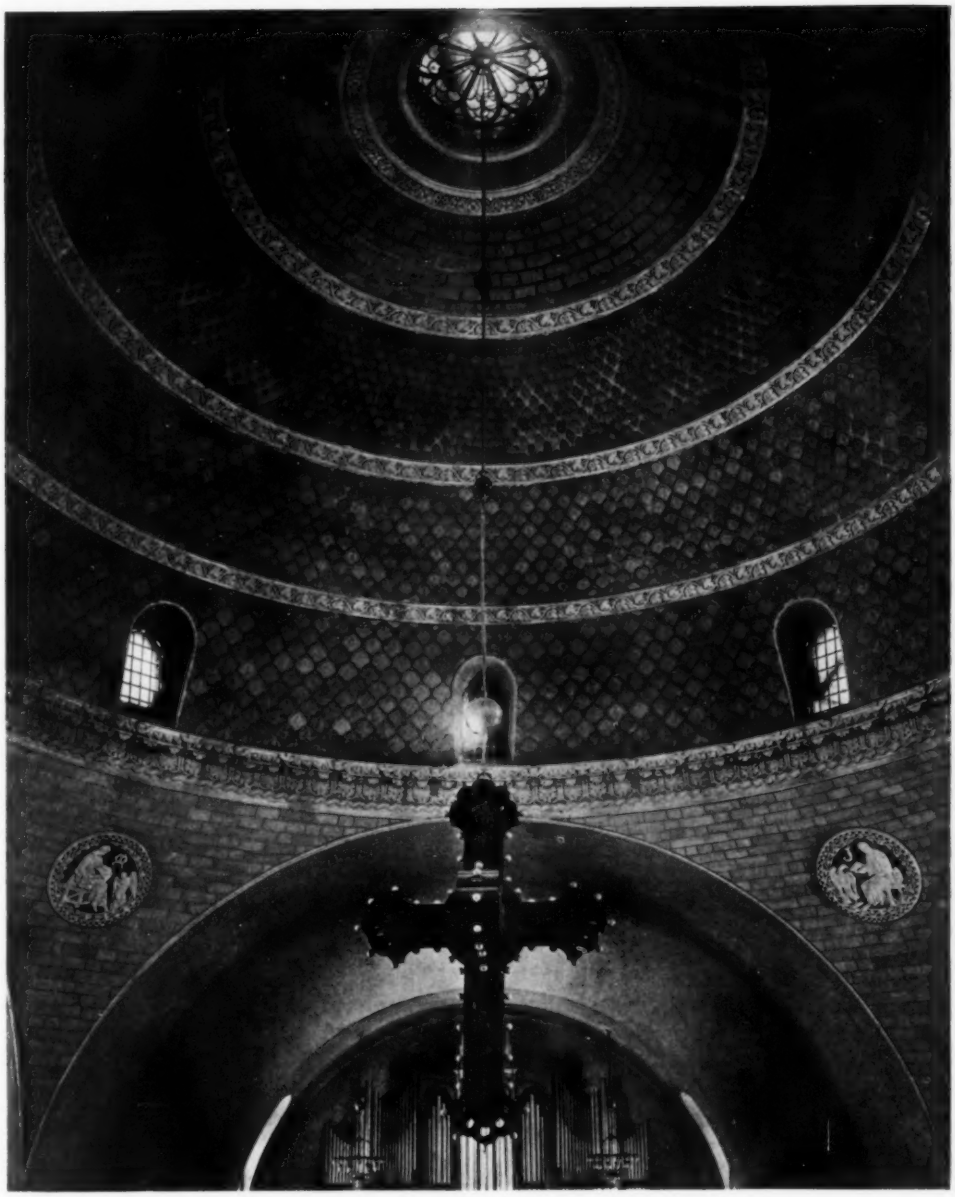
ENTRANCE PORCH—THE FIRST METHODIST EPISCOPAL CHURCH, ASBURY PARK, N. J. LUCIAN E. SMITH AND HARRY E. WARREN, ARCHITECTS.



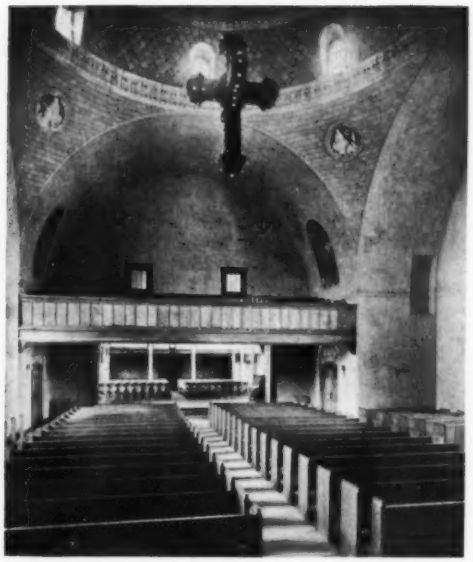
GENERAL VIEW—THE FIRST METHODIST EPISCOPAL CHURCH, ASBURY PARK, N. J. LUCIAN E. SMITH AND HARRY E. WARREN, ARCHITECTS.



WINDOW IN GALLERY—THE FIRST METHODIST EPISCOPAL CHURCH, ASBURY PARK, N. J. LUCIAN E. SMITH AND HARRY E. WARREN, ARCHITECTS.



DETAIL OF DOME—THE FIRST METHODIST EPISCOPAL CHURCH, ASBURY PARK, N. J. LUCIAN E. SMITH AND HARRY E. WARREN, ARCHITECTS.



LOOKING TOWARD GALLERY AND SUNDAY SCHOOL.

LOOKING TOWARD CHOIR AND PULPIT.

entrances to meeting places in the Roman catacombs. The windows of the choir and gallery have the twisted colonettes with crude cubiform capitals of four different designs. In the spandrels above are placed the six-winged seraphim.

The semi-circular lunettes over the doors to the gallery and vestibule are ornamented with a representation of the Lamb of God carrying the small cross and flag and standing on the Book with the Seven Seals, as described by the Evangelist John, surrounded by a nimbus of light and flanked by two adoring angels with censers. The vaults and walls of the auditorium are of rough plaster treated to represent the painted stone of old work. Buff coloring has been incorporated in the plaster to render it permanently decorative.

The supporting motif for the organ is in two planes to give greater relief for the case itself. The small arched openings recall the arcaded treatment so often met with in this style. The decorative elements consist of three foliated corbels, large stepped brackets ornamented with the characteristic crude acanthus leaf and winged cupids' heads. While there is no prototype for an organ in this style, the case has been worked out to harmonize with the style of the interior, the moldings crudely profiled, the Venetian dentil freely used, the cresting and finials recalling those seen in Venice; the arches designed with cusping as was used in the altar of Or San Michele in Florence and the organ of the Hospital of Siena; the pierced panels of the great central tower recalling the pierced screens of Ravenna.

The woodwork and furniture have been designed to harmonize with the style using the octagonal colonette, Venetian dentil and tooth ornament. The color of the woodwork throughout has been kept as near as weathered natural wood as possible. The aisles are of marble terrazzo.

For the lighting fixtures of the auditorium there is no precedent, but a new type has been developed using Romanesque decorative motifs executed in sheet metal, enameled and painted. The great cross in the auditorium is of pierced, painted and gilded metal. The side brackets are of pierced metal, enameled and gilded. The lamps give a golden glow to the light, which blends happily with the rich stained glass of the windows.

TWO TOWN HALLS

At Millburn, N.J.: Horatio W. Olcott,~ Architect

&

At Roselle, N.J.: Warrington G. Lawrence, Architect

By

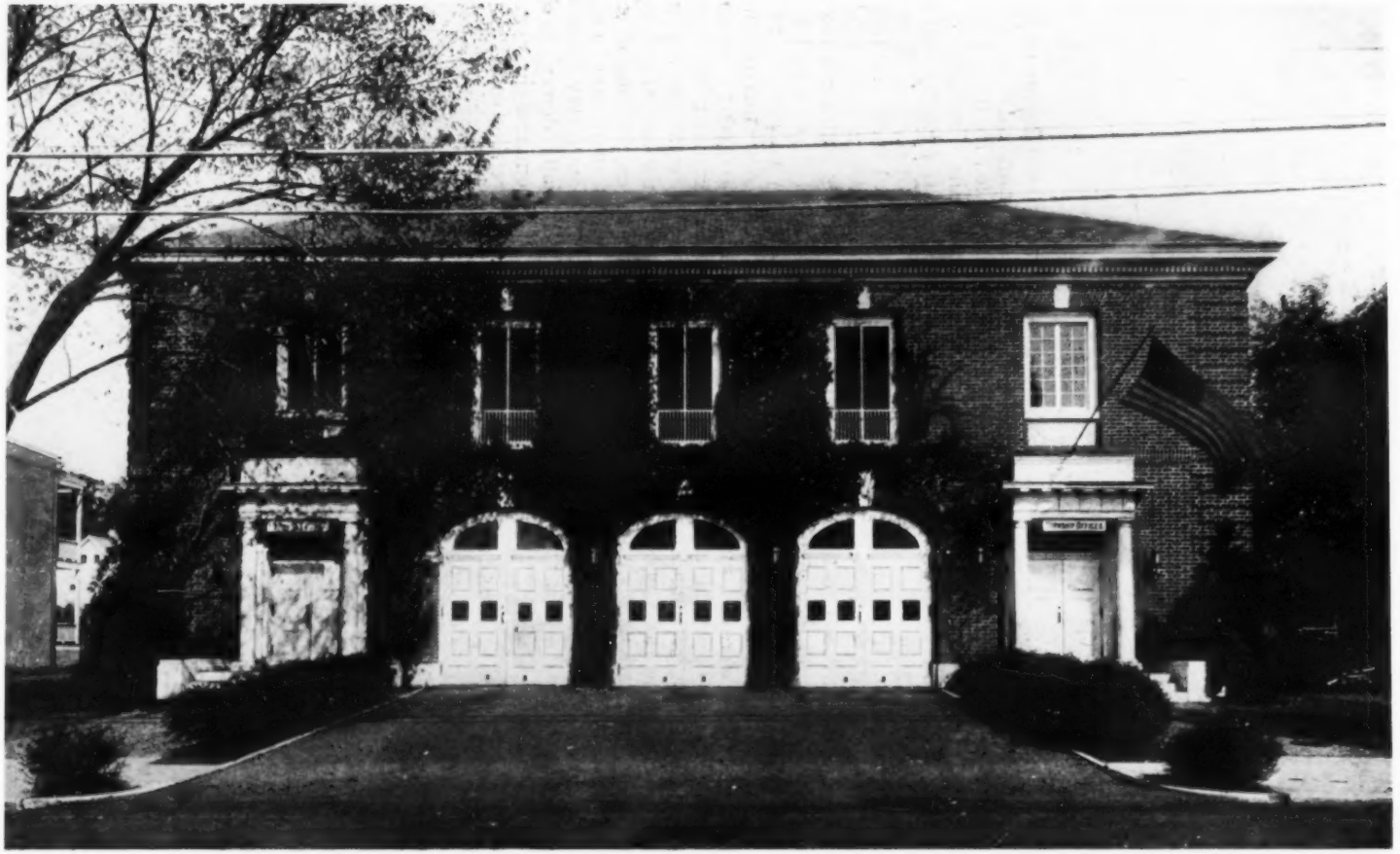
Jack Manley Rosé and
Grace Norton Rosé

IT occasionally happens that, despite political influence, the more or less mediocre taste of the majority of citizens, and the everlasting necessity for compromise, an architect miraculously gets a chance to design and erect a civic building expressive of his own conception. The two buildings shown in the following pages are a credit to the communities which surround them and a joy to the lover of architectural beauty.

The problems presented by both municipal buildings were in many respects identical. The communities, while of rather differing character and population, still required the same general incorporation of the various civic departments. For instance, in each building the housing of a vigorous fire department had to be considered; almost primarily considered in the case of Millburn. How excellently the architect, Mr. Olcott, met this utilitarian purpose, and kept his building so charming in proportion and so delightfully ornamental to the little town, is decidedly apparent.

In the Roselle edifice the housing of this most valuable department was subordinated cleverly to the dignity of the structure. This building, so admirably adapted to a fairly limited frontage, takes its inspiration from the beautiful old State House in Boston. Rarely can a small city of such rapid and recent growth boast so fair and stately a public building. It has all the charms of Colonial America at her best and, apart from that, a special appeal of its own that the formal approach greatly enhances.

Of restful red brick in mellow and varied tones, widely jointed in cream mortar, with its deep cream trim, from the wide esplanade of concrete flecked with tree shadow to the green capped cupola of weathering copper, the effect is arresting and noteworthy. Especially deserving of comment in detail are the front Palladian window and the cleverly proportioned series of windows at the sides with their wrought iron balconies; unusual and remarkable is the care given even to the designing of the flagstaff support. Mantled in vines, as the building is this fall, and judiciously planted with privet clumps and hedges, it stands a rare gem set in a little town



FRONT VIEW—TOWN HALL, MILLBURN, N. J. HORATIO W. OLCOTT, ARCHITECT.

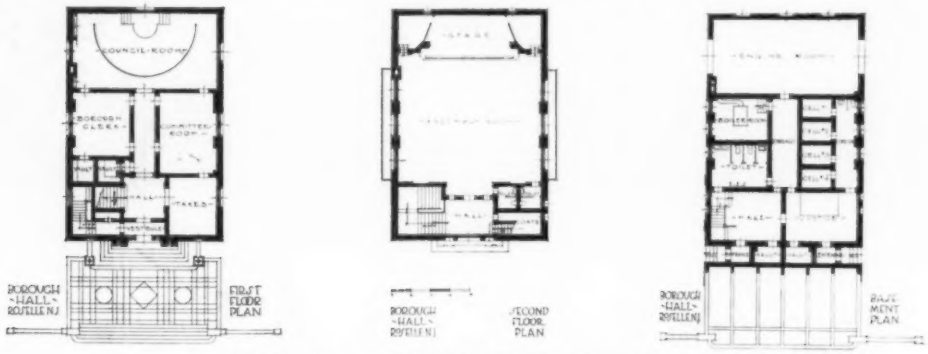
VIEW FROM THE SOUTHWEST—TOWN HALL, MILLBURN, N. J. HORATIO W. OLCOTT, ARCHITECT.

FLOOR PLANS, TOWN HALL, MILLBURN, N. J.
Horatio W. Olcott, Architect.

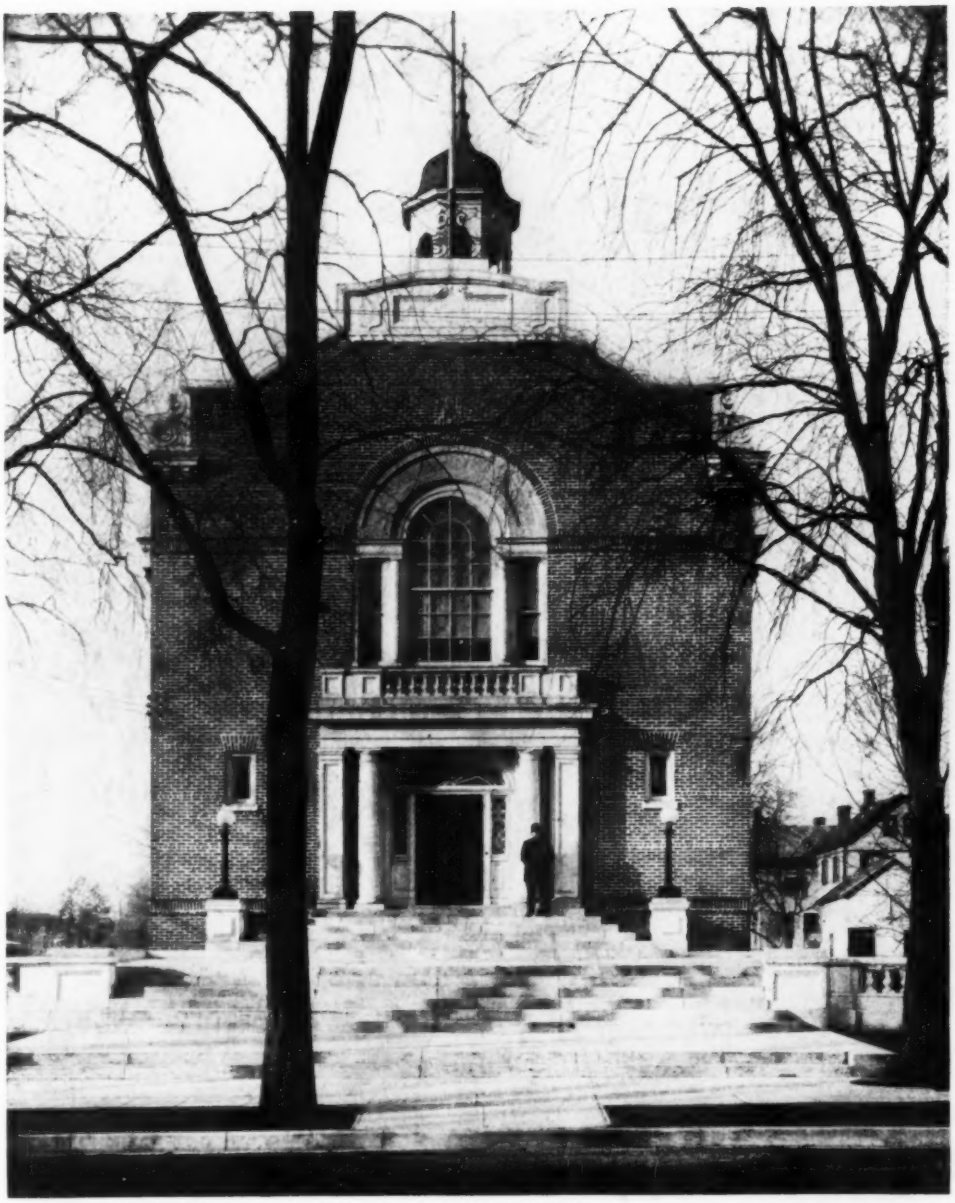
at present decidedly in the throes of hasty reconstruction; and it is most prayerfully to be hoped that it may serve as a pattern and a standard for future building in that pretty little tree-shaded borough. In this building the architect, Mr. Warrington Lawrence, has designed himself a monument of permanent beauty.

In the Millburn township building the simplicity of design is of itself noteworthy—yet the detail is excellent. Practical, economical and extraordinarily pleasing, the clear shining white trim and deep red brick walls embroidered in green vines, give a serene workmanlike appearance, and a well-scrubbed look of spotless efficiency, aside from the matter of true proportion and agreeable spacing of doors and windows. With its gray-green roof, the dark verdure of the simple planting and the variety lent to the brickwork by the Flemish bond coursing and the quoin treatment at the corners, the building has no lack of interest in its straightforward appeal.

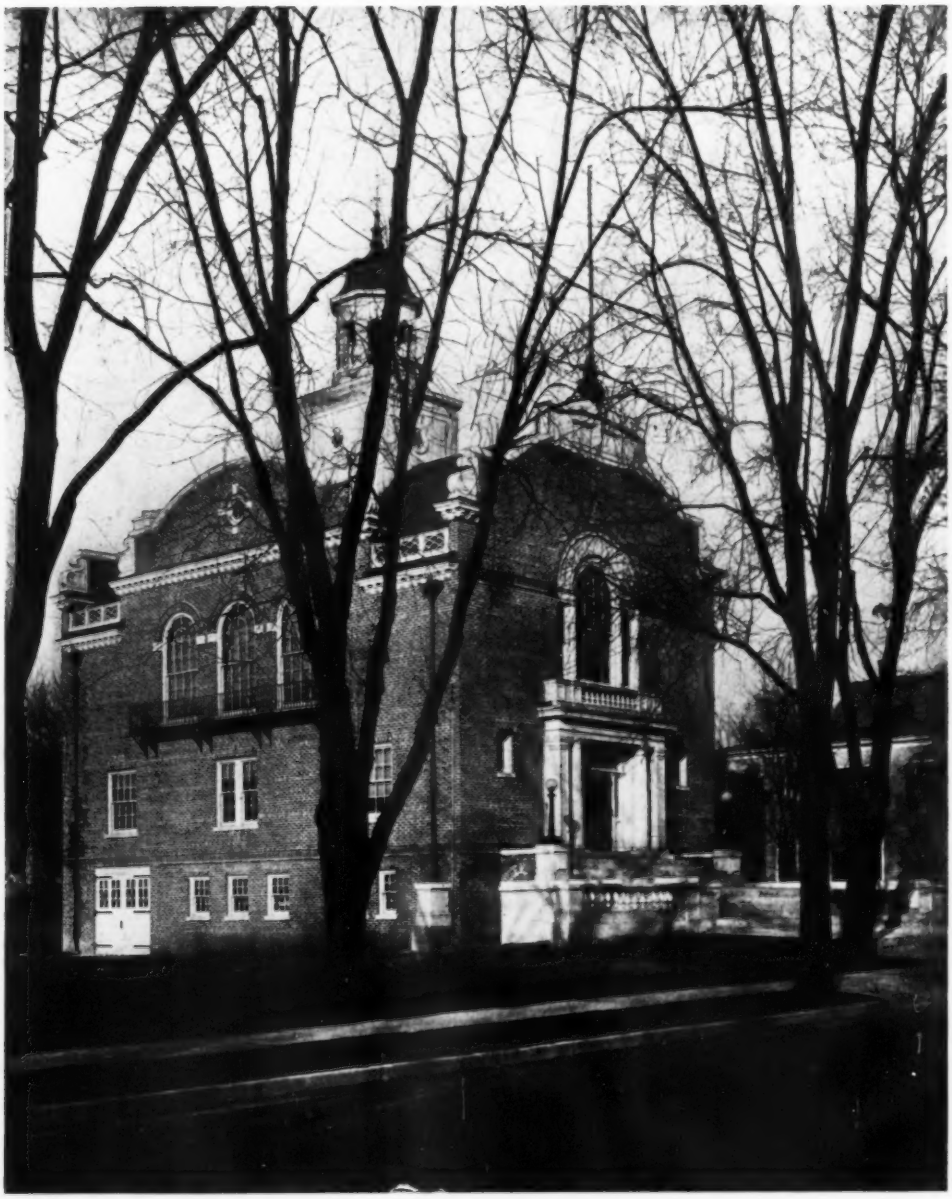
The floor plans are models of conserved space and workability. With the fire department occupying the greater part of the ground floor, the police department distinct and separate on one side, and the entrance to the township offices, which occupy the entire upper floor, on the other, a balance is preserved. An adequate jail which complies with all sanitary and humanitarian requirements, runs out from the police department into a



FLOOR PLANS, BOROUGH HALL, ROSELLE, N. J.
Warrington G. Lawrence, Architect.



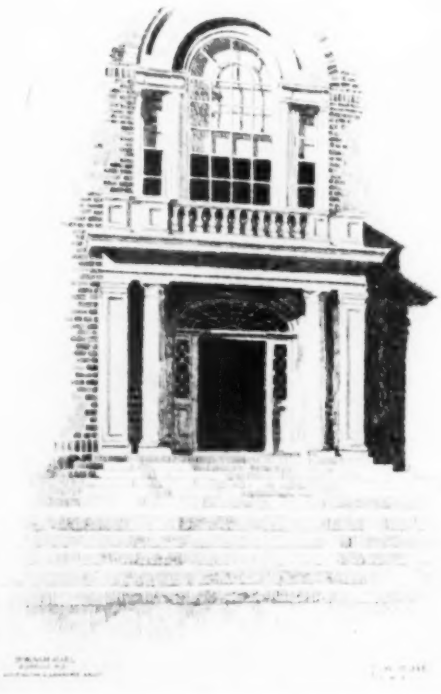
FRONT VIEW—BOROUGH HALL, ROSELLE, N. J.
WARRINGTON G. LAWRENCE, ARCHITECT.



SOUTHEAST VIEW—BOROUGH HALL, ROSELLE, N. J. WARRINGTON G. LAWRENCE, ARCHITECT.

REAR VIEW—BOROUGH HALL, ROSELLE, N. J.
WARRINGTON G. LAWRENCE, ARCHITECT.

one-story extension. The remainder of the police department space consists of a small court room, a patrolmen's room and an office for the chief. The fire department, evidently a prized and much appreciated township adjunct, is very attractively housed. Besides its large cement-floored garage for three strictly modern motor apparatus, bright with polished brass and spotlessly clean, the firemen have a store room, a bed room and a lounging room with shower and lavatory. The second floor space is devoted to a hall and corridor, a large council chamber with railed off platform, the tax collector's office, the assessor's office, the office of the clerk of the board of health, a committee room and two lavatories and two vaults.



MAIN ENTRANCE—BOROUGH HALL, ROSELLE, N. J.

In considering the plan of the Roselle building, we find the large and high-ceilinged basement devoted to engine room, court room, jail, boiler room, vault space and toilets. The first floor, besides containing a pleasant council chamber, has a committee room, a borough clerk's room and a room for the tax department. Up a rather wide and well-lighted stair, is a large assembly room with a stage where municipal motion pictures have been given regularly and many public gatherings are held.

Strictest economy has been observed in the interior treatment of both buildings and no attempt is made for impressive or elaborate finish. Wearable brown stain for the woodwork and buff-tinted plaster for the walls prevail in Roselle, while gray-white plaster and dark fumed oak stained woodwork have been used in the Millburn Building.

Unfortunately, town halls—if we may so call them—of the calibre of these buildings are too rarely found among the towns and boroughs of our growing suburbs. Very few buildings of historical interest and early American charm have been preserved to us as city or borough halls, and those erected in the later years have shown little permanence of design.

Only of recent years, perhaps, has there developed a feeling for civic buildings that do justice to the community in which they stand. We are, with the help of sincere and high-minded architects, securing a few municipal buildings here and there of undoubted merit. Fine schools we have, and churches, libraries, private dwellings and attractive inns, and, lately, memorial community halls that add much to a towns' allure. When we house offices of the community's body politic in buildings such as these, we have made big strides toward inculcating efficiency among our public servants and civic pride among our citizens.

TENDENCIES IN APARTMENT HOUSE DESIGN

PART VI - "OPEN COURT" TYPES

By FRANK CHOUTEAU BROWN

QUITE a number of years ago apartment house plans first began to develop into the "Court" type, with the court opening upon the street and becoming an important part of the esthetic treatment of the exterior. Previously these courts had been merely a necessary part of the plan, devised only to secure light and ventilation for the interior and rear rooms, and had always opened to the rear of the structure—or had been narrow restricted slits, completely enclosed between the narrow deep plans that were then the customary and indeed inevitable apartment house scheme for the crowded city block.

As a matter of fact, it was in the suburbs that these "open court" plans were first attempted. The solution seemed then a possible one for the lower cost suburban land, especially when the lot areas to be developed were fairly large, and too deep to readily carry the older-fashioned conventional plan, without leaving a great deal of property still unused in the rear of the structure.

Where a piece of land was, let us say, two hundred feet deep, and a hundred and twenty-five or fifty feet front upon the street, it was at once obvious to the trained architectural planner that it was economically poor policy to build only upon the front half of the property, at the most obtaining only six to eight of the old fashioned narrow-plan "railroad" type of apartments. The trouble up to that time had been, of course, that this sort of problem had rarely come into the architect's office at all. Most of the early apartment buildings had been the product of the speculative builder and the contractor, who had merely gone along unthinkingly reproducing the conventional and commonplace type.

With the proportions of this deep and wide lot upon his drawing board, it became apparent that a far more economical and complete development of the land area could be undertaken by building around the three outer sides of the square and leaving the front central portion, opening upon the street, as the common property of all the tenants, across which they could all obtain some advantage of the street outlook and frontage. Such an arrangement of the plan, once worked out in detail, proved it possible to accommodate by this means up to 50 per cent. more families upon the same piece of property, each possessing as much, if not more, of a street outlook than before.

It was, however, at once discovered that, with a lot of land of these approximate proportions, it was both desirable and necessary to change the plan of the individual apartment from the long narrow deep scheme to a wider, shallower, more compact arrangement, such as we have already traced in its development in previous articles. This proportionately reduced the number of apartments that could benefit from the street outlook around the interior of the court, at the same time making the interior arrangement of the apartments themselves more convenient and desirable.

Even with this change in arrangement, however, it was still possible to increase the number of families to be accommodated around the court by about 20 per cent. over those that could have been housed directly upon the street frontage

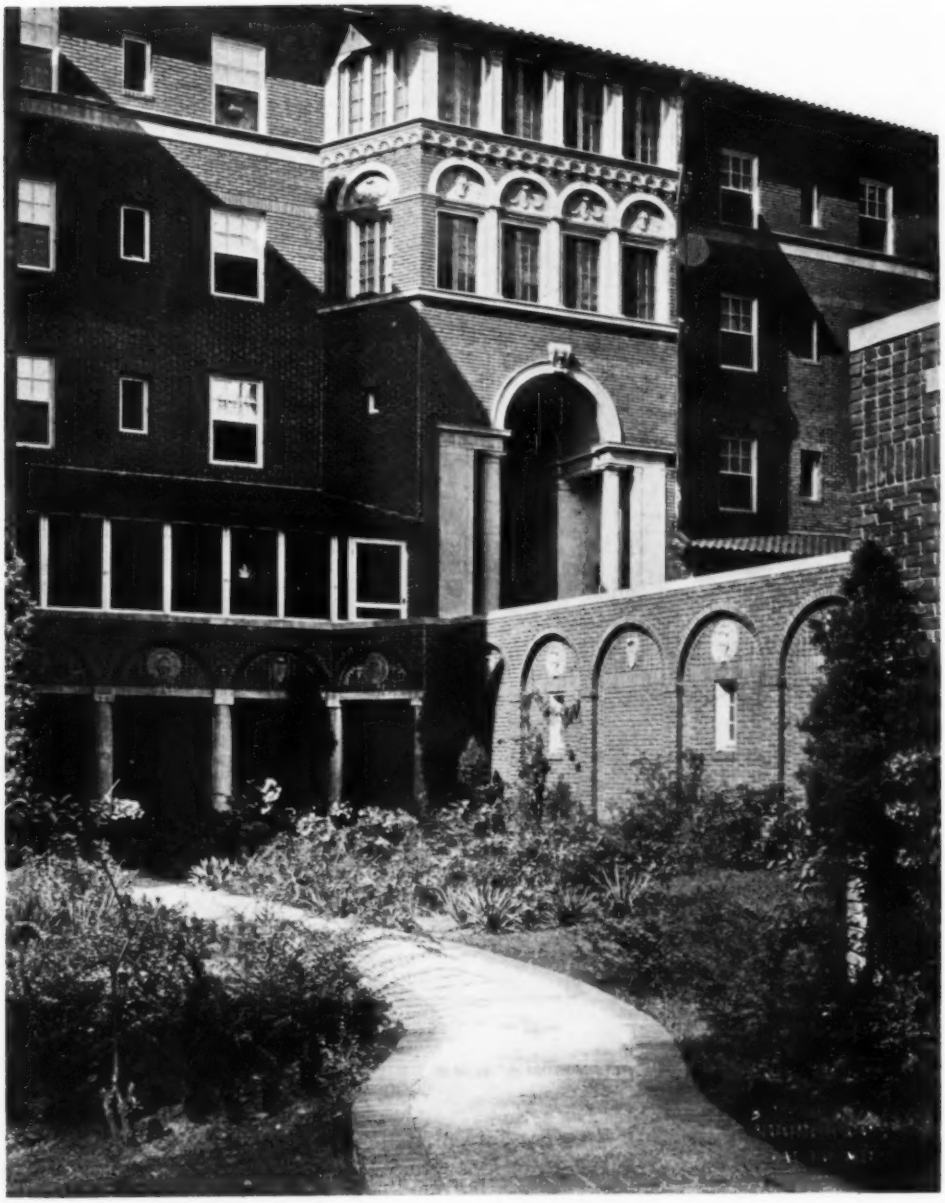


FIG. 64. TUSCANY APARTMENT HOUSE, BALTIMORE, MD. CLYDE N. FRIZ, ARCHITECT.

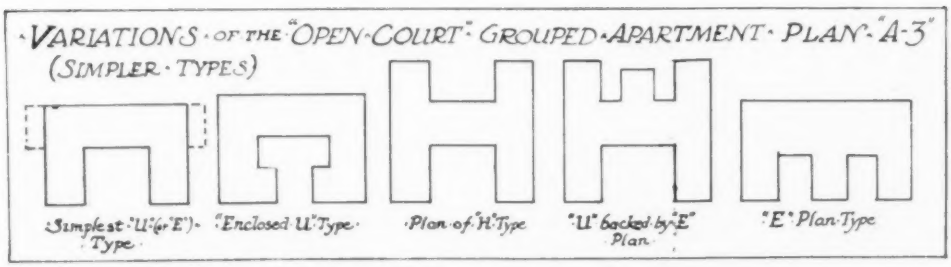


FIG. 65. THE SIMPLER TYPE OF "OPEN COURT" APARTMENT PLANS.

of the property—and in much more conveniently planned and more desirable apartments. This courtyard once obtained, it was apparent that it provided an opportunity for attractive planting, that actually doubled its value to the tenants and was of advantage to the owner as a drawing power in keeping his apartments full and his rents high, at one and the same time.

Among the very first buildings of this type to be constructed was "Richmond Court," built about twenty years ago, near Boston in Brookline, facing on Beacon street, by Cram, Goodhue and Ferguson, on a spaciously large frontage (nearly two hundred and fifty feet) and a rather deep lot, to which this general type of plan arrangement is so particularly well adapted. At very nearly the same time two other buildings were built in Boston and in Cambridge, "Trinity Court" and "Riverbank Court," carried out in a similar style of architectural treatment, employing English Tudor motives—with its obvious advantages in providing appropriate "bays" supplying outlook to right and left, all advances over the then prevalent types of apartment houses, both in design and construction. All three groups were widely illustrated and should have exerted more of an effect upon contemporaneous architecture the country over than seems to have been the actual case, as all proved to be unusually successful—from a purely financial as well as from a merely architectural point of view.

The outline plans of all were different. "Richmond Court" follows a fully open "U" type, "Riverbank Court" is clearly developed from the "H" shaped plan, and "Trinity Court" was built entirely around a rather narrow courtyard. In the case of "Riverbank Court" particularly, there was a very good reason for the plan. It enabled a large part of the occupants to benefit from the river views afforded by the location of the building on the Charles River at the Cambridge end of the Harvard Bridge. "Trinity Court," had, on the other hand, as good a reason for its closed-in square. It was built directly alongside of the Trinity Place station on the Boston & Albany, and consequently there was every reason to protect the occupants as much as possible from the noise, dust and smoke of the trains.

All these plans suffered in detail from the fact that the suites were composed of rooms too small in size. "Richmond Court," built around a courtyard about ninety feet wide by eighty feet deep, had small living apartments, principally of four and five rooms, entered from staircases serving sections of the whole plan, which was thus divided among a number of small "Halls"—a fairly economical method so far as eliminating long public corridors was concerned. It also allowed the apartments to extend entirely through the structure, from front to back, thus ensuring cross ventilation—a very important matter if the buildings are to be comfortably occupied in summertime.

"Trinity Court" is also arranged as a series of sections, each a separate portion of the structure, with individual staircase and, in this case, an elevator, as well, the building being of six stories height, with studios arranged upon the

FIG. 66. TUSCANY APARTMENT HOUSE, BALTIMORE, MD.
Clyde N. Friz, Architect.

upper floors. The economy of this method of planning now becomes more debatable, as it incurs a constant running expense in the maintenance of so many separate elevators, where one or two would otherwise have served the whole structure, if there had been circulating corridors around the court on each floor. The apartments in this building are mostly of two and three rooms, and again run through the structure from its outside face to the interior court, so that the matter of cross ventilation is thoroughly provided for. The narrow width of the court and relatively greater height of the walls surrounding it, made it impossible for much use to be made of shrubbery, in this instance. It nevertheless provides grateful space for air and sun, and helps make the small apartments desirable and comfortable for their occupants.

In "Riverbank Court," a quite different type of plan has been developed. The entire lot to be built upon was much larger than in the last example—somewhat wider, as a matter of fact, than in the case of "Richmond Court" in Brookline—and the apartments were all to be non-housekeeping apartments, again mostly of two and three-room units, and many as small as the one room and alcove and bath type. The arms of the letter "H" were also thick enough to allow of a wide central corridor being used, with rooms facing out on each side. The result was that, except in the apartments located on the outer corners of these arms, no cross draft was possible—except through the public corridors. Advantage was taken of this opportunity by equipping the apartments with "blind" slat doors opening outward into the corridors, so that the tenants had the option on hot summer nights of leaving the inner doors ajar and securing a certain amount of air

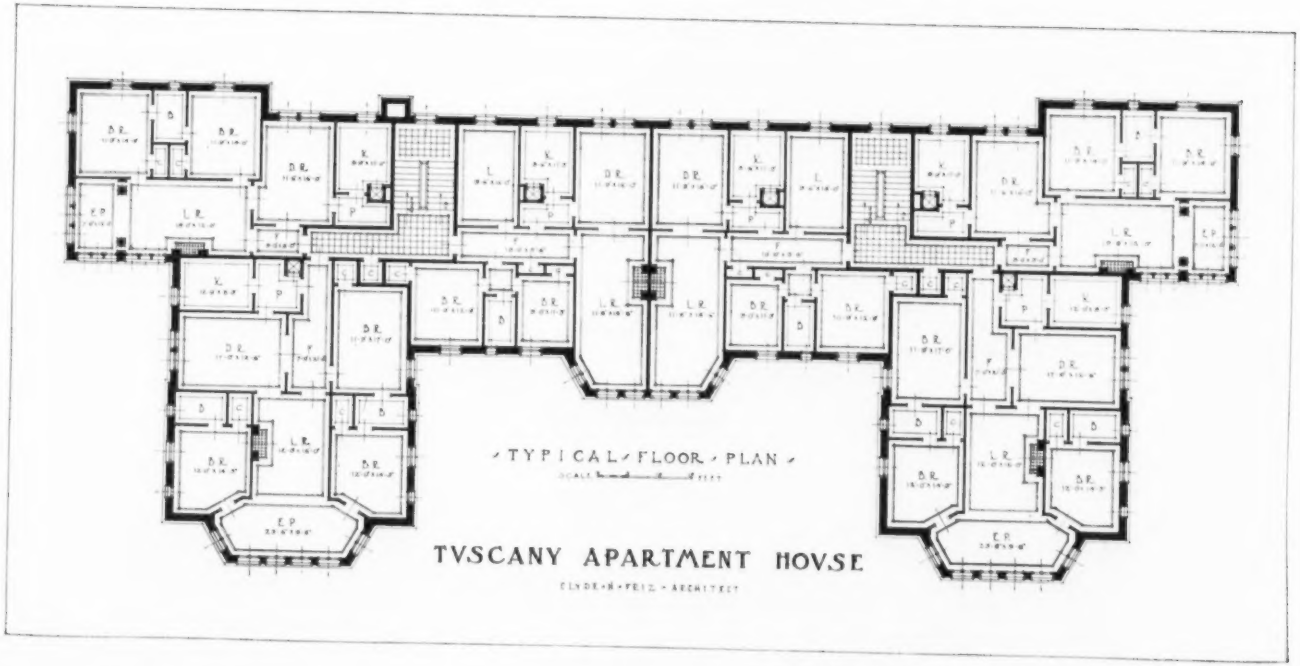


FIG. 67. TUSCANY APARTMENT HOUSE, BALTIMORE, MD. CLYDE N. FRIZ, ARCHITECT.

FIG. 68

drawing across between door and window—not always, of course, of the purest or coolest quality, but nevertheless air. Two batteries of elevators, one at each side of the central cross corridor connecting the two long ranges of the "H", were provided to serve all tenants. Both here and in "Trinity" a public dining room was provided, although it was not important in the latter case, as the building was near a central business section, where many nearby restaurants were available for the use of the tenants.

All of these ventures were so devised that they provided a small unit apartment, with over-small rooms—a basis upon which too much of this class of apartment development has since been predicated.

Within a very few years it was discovered that these courtyards possessed still another advantage, the true value of which was not perhaps suspected at the time they were first adopted. This lay in the comparative quiet and increased cleanliness of the more retired apartments, which became so much the more desirable than the ones upon the streets, once the automobile began to come into as wide general use as began to be the case a few years after the first large apartment house groups of this kind were built in some of our principal city suburbs.

It was also discovered that they were not only a desirable type for the suburb of the large city, but a profitable and desirable type for even the more expensive and crowded portions of these large cities themselves, as will be well illustrated by some of the examples reproduced in this and the succeeding article. Not only that, but whereas this type was, in the first instance, invented for application only to the very deep piece of land, it has recently been found an economically desirable type of construction to go upon the comparatively shallow lot, once its length upon the street and its proportions have been found available for even

FIG. 69. LINNAEAN HALL, CAMBRIDGE, MASS. NEWHALL & BLEVINS, ARCHITECTS.

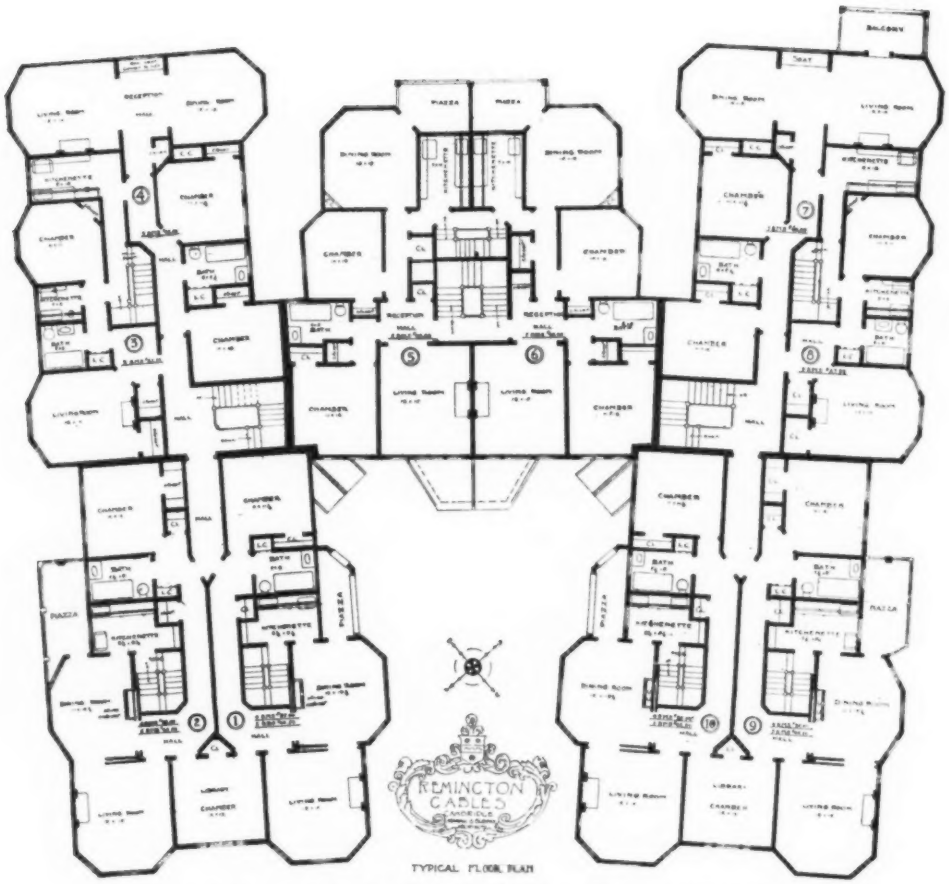


FIG. 70. TYPICAL FLOOR PLAN, REMINGTON GABLES, CAMBRIDGE, MASS.
Newhall & Blevins, Architects.

the shallow depth court. In this relation we can undertake to continue the development of this idea from where we left it in the last article, for it is at once evident that a piece of property capable of being improved with a range of double rooms along the street frontage and carrying short ells out to the rear for service portions, is just as well adapted to building the range of major rooms nearer the *rear* lot line and advancing other principal rooms toward the street line, thus obtaining more outlook up and down the fronting street. This is an arrangement that has particular advantages when it would be by these means possible to obtain for these principal rooms a better exposure for sun or air, as well as an improvement of the outlook, as already mentioned.

Before resuming the trend of this progress from the point where it was discontinued let us first consider for a moment some of the different possibilities available from a more complete utilization of the "open court" idea. And although almost every point will be illustrated by the individual plans, it will be more definitely comprehended by the comparative plan outlines that not only possess the advantage of immediate juxtaposition, but also, by elimination of the fussy details of the plans themselves, more clearly illustrate the main "courtyard" idea.

Such a grouping of plan outlines—

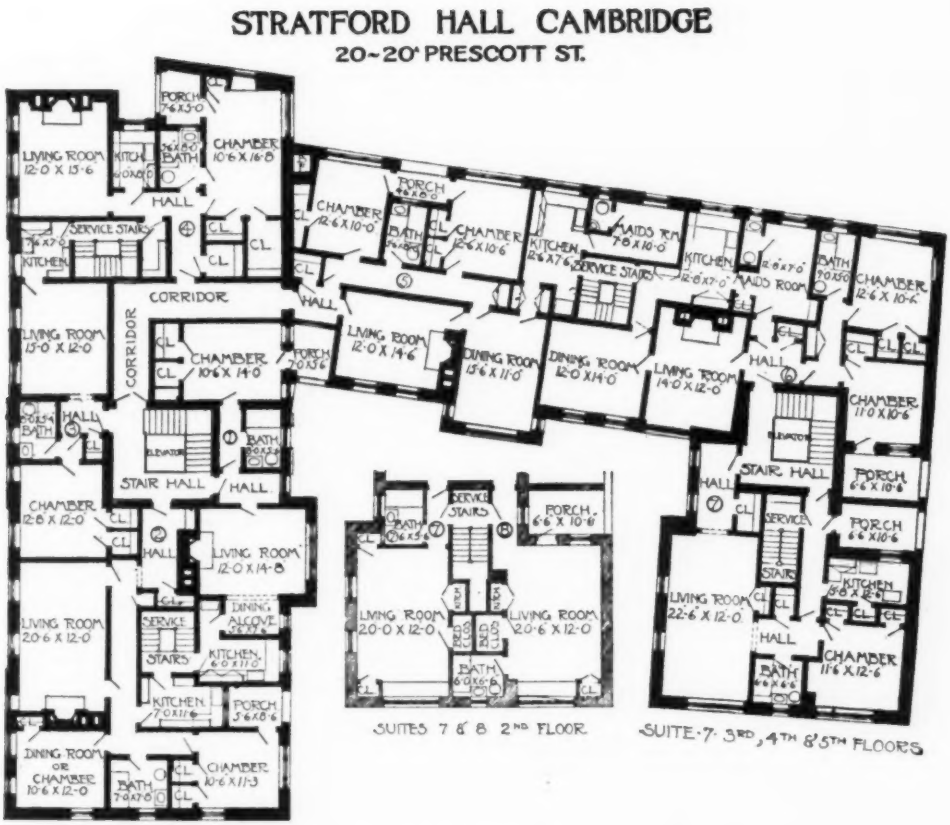


FIG. 71. TYPICAL FLOOR PLANS, CAMBRIDGE, MASS.
Goodell & Root, Architects.

so far as they apply to the structures illustrated in this article—is shown as Fig. 65. They are all some minor development of the plan-type that was shown as "A-3," Fig. 36 in Part IV, published in the September issue. The first group shows these "court plans" as they most easily apply to the proportions of the shallow lot. A second group will show how certain other modifications are better adapted to provide more desirable apartments when the same type of plan is adapted to meet the conditions of the narrower and deeper shaped lot of land. A certain number are, of course, available—with some obvious minor modifications—to both shallow and deep plots of land.

Perhaps the best example of the wide and shallow lot treatment is provided us in Fig. 67, where the building itself covers a plot about two hundred feet long by eighty feet deep, with, of course, some additional space to provide the occupants with light and air upon all sides. Not only is this an excellent example of the "E" type of plan, to which it fully conforms, even to the small central bay, but it also illustrates a still further development in length, in the two smaller end courts obtained by bringing the two principal projecting ells in from the extreme ends of the plan and leaving a considerable section of the major range of the building extending out beyond these forward projecting ells at each end. The advantage of securing the full benefits of the exposure in the two wings is obvious,

quite aside from the particular and individual utilization of the idea that is made in this plan. Each floor of this building obtains six apartments, all possessing spacious rooms, and the plan repeats itself on each side of the centre line. The building is only four stories in height and no elevator is used. Space in the public halls is saved by having two staircases and entrances, each serving one-half the building, and each apartment requires only a very short interior hallway. No separate rear staircase is provided; the different ranges of kitchens being very efficiently served by dumbwaiters reached from the basement story.

The plan is of the suburban type, four of the apartments on each floor containing a sunroom or "porch," and full advantage has been taken of the very attractive surroundings to make the exterior of the structure attractive and pleasing in both an architectural and a popular manner, as is well illustrated by Figs. 64 and 66. Even the difference in the grades, complicated as it is by the great length of the building, has been most ingeniously utilized by the designer to add attraction and interest to his structure.

The type of arrangement around a long

FIG. 72. STRATFORD HALL, CAMBRIDGE, MASS.
Goodell & Root, Architects.

FIG. 73. COURTYARD—STRATFORD HALL, CAMBRIDGE, MASS. GOODELL & ROOT, ARCHITECTS.

FIG. 74. GOLD MEDAL APARTMENT HOUSE, CORNER OF GRAND CONCOURSE AND 167TH ST., NEW YORK CITY.
Springsteen & Goldhammer, Architects.

shallow court next shown in the key-plan group will be better illustrated in detail in a later article. It shows the beginning of the tendency to "close in" the courtyard by adding sections to the inner sides of the projecting wings or ells, so working toward the "enclosed courtyard" type of plan.

In Fig. 68 we have a plan of more nearly square proportions. The width of the building over all is about one hundred and forty feet, the depth upon the left hand side about one hundred and six feet and upon the shallower side of the lot about ninety feet. The courtyard itself is about thirty feet wide by fifty feet deep.

This plan illustrates a very compact use of the "open court" idea; perhaps as compact as is possible, except that further saving could be made by narrowing the width of the two wings on the street to the point where they would contain only one apartment on their face, instead of the two in each wing that are here secured. In that event, however, the width of the wing upon the street would probably be as much as the three-room width shown in the previous example, so saving only the difference between about fifty-four to forty feet, or only thirty feet in the width of the entire lot—at the most it would not exceed the thirty-two or thirty-three feet shown in the width of these same ells in Fig. 71.

Fig. 68 again, as is indeed true of most of these plans, is repeated practically on each side of the centre of the court. Eight apartments are obtained on each floor, four on each side of the centre party wall, and these apartments are, by very ingenious planning, all served by a single flight of front stairs, and a small amount of public corridor. One rear stairs also suffices for both the two rear apartments, but each of the two apartments in the front of each ell requires its own rear staircase, connecting directly with the kitchen upon each floor.

The plan is also "suburban" in type, insofar as it provides the tenants with "piazzas" or sun or sleeping rooms; and these are located, it should be noted, with no loss of actual exposure, where the kitchens or bathrooms of the apartments would otherwise have come to the

FIG. 75. TYPICAL FLOOR PLAN—GOLD MEDAL APARTMENT HOUSE, CORNER OF GRAND CONCOURSE AND 167TH STREET, NEW YORK CITY.
Springsteen & Goldhammer, Architects.

face of the outer wall. In other words, by keeping these rooms somewhat recessed from the outer face of the building, it was possible to insert a shallow "porch" outside these rooms without either theoretically depriving them of light and air, or conflicting with the strict laws providing for their ventilation to the outer air. Of course, one cannot be expected to foresee what may happen when the individual tenants have fully furnished, screened (and even, possibly, glazed) these spaces to suit their own conveniences and requirements.

Of the eight apartments on each floor of this building six are of five rooms, including the "kitchenette," and two of four rooms. The piazzas are omitted from this computation. The plan last shown had two apartments of five and four of six rooms to the floor—also omitting the porches. But, of course, the apartments now being considered (Fig. 68) have far smaller rooms, and the whole structure was necessarily compacted to fit a far smaller lot area, and to meet a different class of rental conditions.

In Fig. 70 we have an illustration of the type of plan that on the street face conforms to the typical "E" or "U" shape around an open court and has an outline on the rear, or opposite face, that conforms to the "E" shape. The plan arrangement, particularly of the suites in the projecting wings toward the street, is very similar in many ways to the plan last illustrated. The wings are narrower, and in place of the two center rooms, one belonging to each apartment of the previous plan, this arrangement shows a single room in this location, so disposed that it can be connected with and rented as a part of either apartment.

The wing immediately behind, projecting toward the rear, contains a six-room and a three-room apartment, both served —as also are the two front apartments— from one front hall and stairs.

The central section of this group plan, fronting on the street court as it does, and extending toward the rear in the shape of the letter "T," possessing its own front and rear stairs, contains two apartments of five rooms each on each floor. It is, to all intents and purposes, a separate apartment building. It has no contact with the two wings except in the common party or fire walls, and has no physical

connection with them. It possesses the common frontage on the court, however, and serves to fill in the rear of the same, thus utilizing the frontage that it provides. The whole group contains ten apartments to the floor, and is the product of ingenious planning, utilizing every possibility of a somewhat over-small lot, the size of which is responsible for the somewhat cramped aspect of the arrangement that results. It should also be noted that both these plans provide the tenants as much cross draft and exposure as they could expect to secure in a private house.

Before going on to the next most nearly allied example, and showing a plan with the extension of three wings or ells to the street, thus dividing the large central court into two smaller courtyards (as was the case in the rear of the plan last shown) let us first consider an arrangement that suggests many possibilities that we have as yet not often found utilized in our many examples of apartment house plans. The reference is to a building outline that conforms exactly to the "open court" type, as it is illustrated, for instance, in Fig. 68—with the single—but important—exception that we now find the court does not open on or front upon the street, but to one side of the lot, leaving a solid façade upon the street front, actually the "side" elevation of one of the wings or ells.

An example of this unusual type of plan is shown in Fig. 71. The conceivable reasons for its existence might actually be many. It might be that a courtyard so opened would best conform to the exposure, or provide the best and most pleasant view. It might be that the owners have in prospect the later acquisition of more land at the right of the plan, and so would eventually go on to complete the enclosure of a square courtyard by their structure—or it might be, as seems to have been the case here, that the proportions of the lot were merely such that the courtyard could be more spaciously provided upon this dimension than upon the front—coupled with the advantages of the better exposure thus obtained for the tenants.

As a matter of fact, the actual building itself occupies a frontage of about one hundred feet, and a depth of about one hundred and thirty-five feet. The plan contains seven suites to the floor shown, and eight on the second floor. Of these suites five are served by the front principal elevator, and two by the elevator in the rear. Four service staircases are required to reach all the suites. Four suites are of two rooms, bath and kitchenette; one of four rooms and bath, and two apartments of six rooms and bath are shown upon the floor plan reproduced. The exterior of the building is illustrated in Fig. 72 as it appears on the street, with just a glimpse of the rear ell appearing at the right, while a second view (Fig. 73) is added to prove how pleasant, and comparatively retired, the apartments grouped around the side courtyard can be. As a matter of fact, it should be obvious that this example indicates a direction in which we might expect to find considerable additional development in the apartment house plans of the immediate future. It also suggests some possibilities of the better orientation of these plans, an aspect that has been in the past, altogether too often ignored.

Figs. 74 and 75 illustrate the "double open court" type that was referred to a few paragraphs ago, also contained upon a lot of exactly one hundred and fifty feet length. The courts are each eighteen feet wide and of a depth of thirty-three and thirty-seven feet, respectively. The lot is also irregular in shape, the depth at one end being ninety and at the other only sixty feet. It has, however, the great advantage of facing upon streets on three sides, so that it was possible for the owner to build entirely over the land purchased, except at the places where he decided to locate the double courts.

It has already been stated that the type of "open court" plan was originally a growth in the suburb, where its apparently wasteful and reckless use of space paid for by the owner as open land, was not so important a matter, because of the low original cost of the area thus left unutilized. But just as the advertiser has come gradually to realize that sometimes a dexterous use of white space will give him

far better returns than an area carefully filled with type, so has the owner of real estate come gradually to appreciate that it is after all a pretty good investment for him to leave a certain portion of his property uncovered by floor area.

New York City has long illustrated the wide prevalence of the "open court" idea, even when applied to the very costly land values that exist in that city. From the big "Hendrick Hudson" apartments overlooking Riverside Drive, to the most insignificant and unnamed of the "walk-up" apartments that have been building on the many numbered side streets of that city during recent years, there has been ample illustration, on the part of both occupants and tenants, that the "open court" plan is accepted—in theory, at least. It is true that, in its practical application, it still often leaves much to be desired. These courts are still too narrow and too deep to provide light to more than the one or two upper stories. They may, or may not, be more efficacious in the matter of air supply, depending upon their exposure and the internal arrangement of the apartment plans—more probably a matter of accidents than of design on the part of the owners or builders. The very existence of any architect whatsoever in connection with the greater majority of the buildings is not often to be discovered by even their closest and most ardent students.

One of the first of the new apartment buildings to be undertaken and completed in New York since the war illustrates the double court idea and, despite the small size of the lot, the courts are of sufficiently wide dimension for their height and depth, to serve not only a practical but also an artistic purpose—as is well shown by the photograph of the exterior printed herewith. The design is not only notable for the fact that the areas contained in these two courts are well in excess of the minimum required by the Tenement House Law (taken in itself, a most encouraging sign) but the plans also indicate that they are far more generous in the sizes of the rooms provided the tenants than has most generally been the case in the past. This, too, is a lesson that we must by now very generally have learned. Formerly, far too many of the class of apartments especially shown in this month's article have been too crowded in arrangement and in the dimensions of the rooms. This particular example, as well as others that have been seen but have not been used for the purposes of illustration, would seem to indicate that the general tendency in this particular has at last somewhat changed its direction, and the newer buildings of this class are going to provide better and larger rooms. The tendency is also apparent in the plan shown in Fig. 71. It certainly indicates a healthier future—even if a more expensive one for the occupants.

The building shown in Figs. 74 and 75 has been given the 1920 Medal of Honor by the Architectural League of New York in the non-fireproof class of multi-family house architecture, and its owner has also been awarded a certificate of merit. This recognition should both do honor to the League itself, and react to help materially the progress of the cheaper class of apartments of New York City toward a more improved type, and to cause more architectural designers to be concerned with the product of this class of work in the future. Both are tendencies much to be encouraged and desired.

This building itself indicates how a very simple and straightforward architectural design may add good proportion and dignity to the material most commonly in use for this class of building, without adding unnecessary detail and expense to the result. For certainly it would be difficult to find anywhere among our apartment house façades, a structure using less embellishment, and depending so much upon good proportions and an intelligent use of brickwork for the success and interest of its appeal.

The BUILDING PROSPECT

By Willford I. King, Ph.D. of The National Bureau of Economic Research, Inc.

THE most casual consideration is sufficient to convince one that the building industry does not stand in isolation but, on the contrary, is affected by the various forces that govern business activity in general. True, there are always some factors which are especially strong in their influence upon the field of construction; but, in general, those forces which make for prosperity or depression in other lines at the same time cause the building industry to flourish or become stagnant. It naturally follows, therefore, that the volume of construction tends to fluctuate in unison with the other phenomena which serve as indicators of the progress of the business cycle.

Not many years ago most business men, and many economists, scoffed at the idea that such a thing as an economic cycle actually existed. Today, while few economists of repute have the temerity to claim that they really understand the nature of the motivating forces underlying the economic waves, they are practically a unit in affirming that a cyclical oscillation pervades nearly every type of business activity. Most progressive business men are also convinced by this time that the business cycle is no figment of the imagination. Since the existence of the phenomenon is so well established, future discussions concerning it are likely to be confined more and more to the nature of and the causes giving rise to the cyclical movements.

Although the most advanced students of the subject are willing to admit that none of the numerous hypotheses concerning the origin of the cycle have as yet been thoroughly established as facts, their careful research has nevertheless made clear some of the outstanding characteristics of the cycle. It is, for instance, known that business activities go in waves having an interval between their crests (or their troughs) of approximately three and one-half years. Unfortunately for the would-be prophet, these wave lengths are not entirely uniform and, worse still, the waves vary greatly in size. Thus far apparently no one is sure as to what causes such differences in altitude; hence the probable height of the next boom or depth of the next depression remains largely a matter of conjecture.

A conclusion about which there is little doubt is that the same wave usually passes over the whole civilized world, though its crest may not reach every locality at exactly the same date. This world-wide nature of the wave motion makes it appear highly improbable that cycles are the product of the actions of some national administration or are caused by some event of outstanding local interest. In fact, the most remarkable thing about these waves of prosperity and depression is their wide scope and striking persistence under varying political conditions. Presidential elections, new legislation, labor disturbances—all such things seem scarcely to ripple the surfaces of the cycle waves, and even the World War proved insufficient to prevent the economic cycle from proceeding in practically normal fashion, at least in the United States. The man who studies the cyclical records of the past is certain to be forced to the conclusion that the idea of a normal plane of activity to which we may sometimes return, and upon which we shall remain

for a long period, is wholly a myth; and when he observes the seemingly inexorable sweep of the economic waves he is likely to direct his efforts toward utilizing each wave for his gain, without wasting energy in moralizing or in vain effort to modify or to combat the wave motion. It is indeed possible that stabilization of business may some day be brought about; but, if so, it will be accomplished through drastic measures, national or possibly world-wide in scope, and not by the isolated actions of individuals or by hastily conceived political panaceas.

In order properly to adjust his affairs, the business man finds it essential, therefore, to procure as accurate, continuous information as possible concerning the successive phases of the wave through which business is passing; and he is entitled to expect help from professional economists. It is in an effort to render such assistance that this series of articles has been published.

It was pointed out in the January number of The Architectural Record that the decline in wholesale prices would probably continue for some months. In the April issue it was suggested that the bottom of the trough was not yet quite reached. As a matter of fact, average wholesale prices, as shown by the reports of the United States Bureau of Labor Statistics, apparently were at their lowest about midsummer, and are at present slowly turning upward again. The indications are now quite definite that most lines of business are distinctly on the up-grade.

There seems to be little doubt that business recovery is influenced by the psychology of entrepreneurs and of the public, as well as by physical forces. As soon as either business men or consumers become convinced that prices are going up, they begin buying for cash or placing orders for goods. The entering of such orders in turn contributes to the rise of prices, and hence the movement accumulates momentum as it continues. One of the best indications that the present slight upturn in prices is not merely an irregularity in the curve is the fact that a relatively optimistic spirit is appearing among business men of all classes.

The question which many persons are asking today is whether the recovery will be slow or rapid. To this query it is, unfortunately, not possible at present to give a definite answer, for the evidence available is somewhat conflicting in its nature.

First let us consider the signs which indicate that the depression will not be over for some time. An important feature is that the stock market still shows little buoyancy. This apparently is caused by the fact that many concerns have not as yet paid their pressing debts and hence are not in shape to expand their operations. The fact that the number of failures continues to increase also leads to the conclusion that liquidation is not yet complete. Recent bank reports indicate that a considerable volume of credits remains "frozen." It is perhaps due to such financial handicaps that unemployment still continues to be so extensive—and this continuance of a large body of men out of work does not augur a boom in the near future.

But not all of the signs on the economic horizon are unfavorable. Bond prices have been climbing slowly since May. As before stated, commodity prices have risen slightly. On the railways, the number of idle cars has greatly diminished, and gross earnings are increasing. Iron production is growing larger. Interest rates are falling and bank reserves are increasing. The evidence, when summed up, seems to indicate that recovery in general business is likely to be rather slow but that activity will be increasing throughout 1922 at a continually accelerating rate of speed.

The most important reason for anticipating a rather sharp rise in prices lies in the immense gold reserves accumulated by the Federal Reserve Banks. The Federal Reserve Board has thus far shown no tendency to limit rediscounting up to the time when the legal limit of forty per cent. has seemed to be in danger. If this policy is followed in the future, it means that the great supply of gold in the present reserves provides the possibility of an enormous expansion of bank credit. As optimism increases it is not

unlikely that business will call for all this credit. If so, deposit currency will increase proportionately, and with its increase, prices will necessarily "sky rocket," as they always do in periods of inflation.

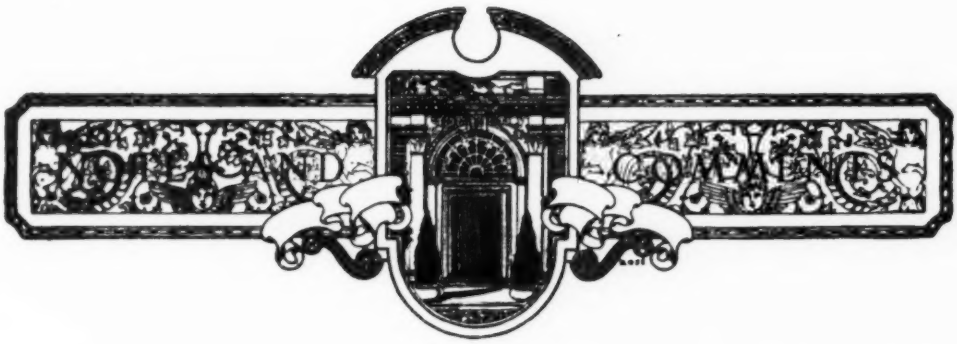
It may of course happen that no large price rise will occur. European industry may recover suddenly and our gold may flow abroad to pay for a great mass of imports. The Federal Reserve Board may protect its reserves by an early and sharp increase in the rediscount rates. Some unforeseen but powerful counteracting force may arise. Such occurrences are, however, rather possibilities than probabilities. Europe will probably be slow in recovering from its monetary debauch and the Federal Reserve Board is unlikely to resist the pressure for new loans. The most probable outlook, therefore, is for sharply rising prices during the latter part of 1922.

Thus far we have discussed only business conditions in general. Just how are these related to the building industry? It was pointed out in the Architectural Record for June that the extent of building for the past few years had been abnormally low and that a considerable deficit of construction, as compared to the usual requirements, had thus accumulated. Building activity has increased during 1921, but it has apparently not wiped out any considerable share of the shortage just mentioned. Construction costs, including the prices of both materials and labor, have fallen steadily as building activity has increased. Material prices appear to have reached bottom, but it is not improbable that the strength of the labor unions has thus far prevented wages from declining to the full extent which might be expected to occur in a depression so severe as the present one.

Unemployment is always a result of the fact that the price at which laborers hold their labor is above the market price. The natural effect of unemployment is to impoverish the laborers and hence to reduce the subjective values which they place upon their labor. The present continuance of unemployment in many lines may, therefore, drive laborers from other industries to the construction field and thus tend to cause some further decline in the wages of building laborers before the present depression is over. It must be admitted, however, that any noticeable drop is by no means certain to occur, for while unemployment in other industries is a force tending to lower wages in the building trades, it may prove of little moment because of the strongly entrenched position of the unions in this field.

Furthermore, there is an offsetting force which tends to maintain or even to increase wages of building workers as well as all other construction costs. As predicted in the May number of this magazine, rents have almost continued to hold their own in spite of declining prices in other lines, and, at present, their movement seems to be slowly upward in harmony with the course of the general price level. If this rise continues, as it probably will, building is likely to be stimulated to such a degree as to cause construction costs soon to start upward again. Inasmuch, however, as these costs are still relatively high as compared to prices in general, it scarcely appears probable that the early part of the year 1922 will be marked by any sharp increases in either building trade wages or prices of materials.

The present prospect is, therefore, that the spring of 1922 will furnish an unusual opportunity for profit to the builder. Interest rates, wages, and material prices will all presumably be relatively low, while the rise in rentals will tend constantly to enhance the value of completed buildings. Both 1922 and 1923 will probably be years of more than normal building activity, but the chances are that the man who builds in 1922 will stand a much better chance of making a profitable venture than will the one who postpones construction work until 1923.



The editor of THE ARCHITECTURAL RECORD takes pleasure in announcing that Mr. Russell F. Whitehead has joined its staff as a consulting and contributing editor. Mr. Whitehead, like Mr. Herbert Croly, is a former editor of THE ARCHITECTURAL RECORD. Both of them—Mr. Croly as editor of The New Republic and Mr. Whitehead as a practicing architect and an officer of the Architectural League of New York—are in contact with the sources of news and of critical opinion in architecture and its allied arts, and have, in addition, a wide personal acquaintance among the men whose current work constitutes the news that is presented and appraised in THE ARCHITECTURAL RECORD.

MICHAEL A. MIKKELSEN.

Hand Books of Samuel Rhoads, Carpenter-Builder

The recent discovery of a part of the working library of Samuel Rhoads, master builder and the designer of the excellent monument of early Pennsylvania architecture, the Pennsylvania Hospital, is of considerable interest. Our knowledge of the identity of the colonial carpenter-builders is meagre and our understanding of how these craftsmen undertook their tasks is indeed hazy and incomplete. Anyone who has delved into the mass of writings and documents of the seventeenth and eighteenth centuries will be impressed with the reluctance of these records to offer sidelights on building history and the personalities of architecture.

Three treatises on building were found at Milton, Pennsylvania, each with the faded and flourishing signature on the title-page, "Samuel Rhoads, Carpinter Builder, His Book." The oldest of the volumes is dated 1724 and presents the claim of being but "a tract" on "Practical Architecture, or a Sure Guide to the True Working Accor[illegible]ing to the Rules of that Science; Representing the Five Orders, with their several Doors & Windows taken from Inigo Jones and other Celebrated Architects." "Very useful," the title page continues, "Very useful to all true Lovers of Architecture, but particularly so to those who are engaged in ye Noble Art of Building." The book was written by William Halfpenny and published by J. Bowles "aganst Stocks Market," London.

The entire book, including preface, explanatory notes, as well as the plates, is "neatly & distinctly engraved on copper and brought into such a size as without burthen may be carryed in the Pocket, and be always ready for use."

The second volume is the well-known issue of Batty and T. Langley,—"The Builder's Jewel: or, the Youth's Remembrancer. Explaining Short and Easy Rules, Made familiar to the meanest Capacity." It was printed in London in 1754 and sold for the price of 4s.6d. This book was intended to instil courage in the breast of the most timorous amateur and apprentice. Thomas Langley sets forth in the introduction his lofty purpose and accomplishment. "I have therefore at the Request of many good Workmen, and for the Sake of young Students, compiled this Work; wherein I have reduced the whole to such short and easy Rules, that the Workmen may, not only at the first View renew his Memory, as Occasions may require, but Apprentices, who may be absolutely unacquainted with this noble Art, and are so unfortunate as many have been, and are, to be bound to Jobbing Masters, *who know but little;* may without the Help of any, by assiduous Application at their leisure Hours, in Evenings when the Business of Days is over, Ec. make themselves such Masters herein, that few Masters are

able or willing to make them. And indeed I must own that 'tis a Pleasure to me to see the Spirit of Emulation so powerful among young Builders at this Time; *when every one of Sense* is endeavoring to become the most excellent in his Way, and thereby make himself the most useful both to himself and his Country."

The third volume is of "pot-folio" size and is similarly boastful of intentions. It is known as "The British Carpenter: or a Treatise on Carpentry. Containing the most Concise and Authentick Rules of that Art, in a more Useful and Extensive Method than has been made Publick." The author is Francis Prices, "Late Surveyor to the Cathedral Church of Salisbury." The work was printed for J. Williams, in Skinner-Row, Dublin, 1768.

The three books present a similarity of plan. They first offer elementary problems in geometry, after which are included plates of the "orders" and in addition, details of construction and such architectural elements as windows, doors and mantels. There is a total absence of concrete suggestions for plan arrangement or complete façade design, which probably implies that the responsibility for the design of an ensemble rested with the individual to whose capacity these handbooks were a "remembrancer."

The knowledge of the ownership of these books on architecture by Samuel Rhoads (one of the most widely known and justly famed carpenter-builders of the eighteenth century) is important, for it strengthens our conviction that these hand-books were generally within arm's reach of the amateur designer. A careful examination of these works would seem to indicate that they were not such complete guides as to leave no need for creative ability on the part of the individual who used them. They were, with rare exceptions, merely books of "the orders" and were not manuals of English architectural practice, nor did they include (as a rule) drawings of extant buildings of the British Isles. Therefore our early architecture was not molded by buildings of the mother country so much as by the engraved specimens of the Italian Renaissance and Roman orders; or, rather, by the spirit of classic proportion.

Much has been written regarding the life and works of Samuel Rhoads because of his prominence in the early annals of Pennsylvania. His chief interest to the student of architectural history rests with the records of his capabilities as an amateur architect. Besides his attainments in building, the wide interests of the man led him to enter upon mercantile pursuits and to become a leader in the public affairs of the colony. He was selected as a representative of the first National Assembly in 1761 and was made the Mayor of Philadelphia in 1774, which position prevented him from being chosen as a delegate to the Second Continental Congress of 1775.

Samuel Rhoads acquired the trade of carpenter and builder by serving an apprenticeship until he was twenty-five years of age, in accordance with the usual practice of the day in learning a useful occupation. He soon became a member of "The Carpenter's Company," in the ranks of which society he advanced to the position of "Master Builder" and for a time served as its treasurer. From 1780 until his death he was the president or "master" of the company.

Rhoads is referred to as a "mechanician" and at one time was associated with Benjamin Franklin in a project for making a certain kind of lime, which, it was thought, would render the houses of Philadelphia fireproof. In 1751, by an act of the Assembly of March 14th, 1761, he was chosen as the commissioner "for cleaning, scouring, and rendering the Schuylkill navigable."

Upon the founding of the Pennsylvania Hospital, he was made the Director of Works for the undertaking. After the acquisition of a site, "a complete plan of the buildings was directed to be so prepared that a part might be erected, which could be occupied the ensuing season (1755). Samuel Rhoads, one of the managers, was very zealous in the work and, after consulting the physicians in regard to the situation of the cells and other conveniences, presented a design of the whole building in such form that one-third might first alone be erected with tolerable symmetry."

The building of the hospital continued under the guiding direction of Rhoads, who remained as one of the managers of the hospital from the founding in 1751 until 1781.

The character of the man is summed up in the statement of a contemporary, William Rawles, who in 1774 said that Samuel Rhoads "was a respectable merchant of Philadelphia, belonging to the Society of Friends—without the talent of

speaking in public, he possessed much acuteness of mind, his judgment was sound, and his practical information extensive."

A. LAWRENCE KOCHER.

Notes on a Detail of Tuberculosis Sanatorium Planning

It is the purpose of these notes to offer suggestions on some methods of meeting the demands of tuberculosis sanatorium superintendents for an important detail of the institutional routine; namely, the collection and disposal of infective discharges in the form of the sputum of sufferers from pulmonary forms of the disease.

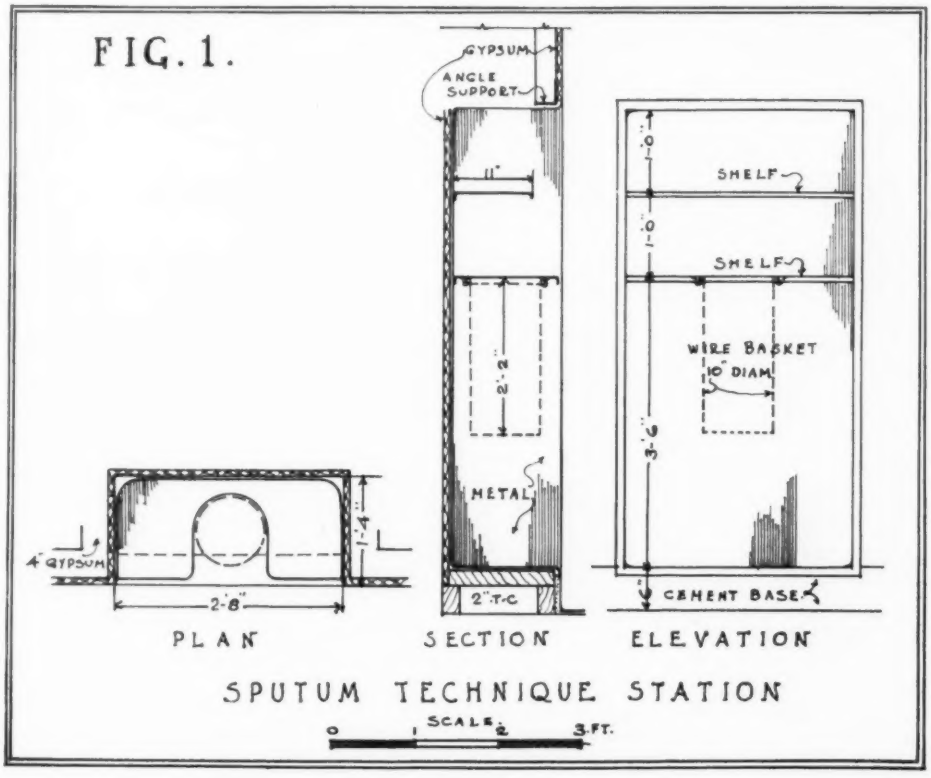
A patient in a tuberculosis sanatorium is usually placed in one of three categories: (a) infirmary, or bed cases; (b) semi-ambulant cases, and (c) ambulant cases.

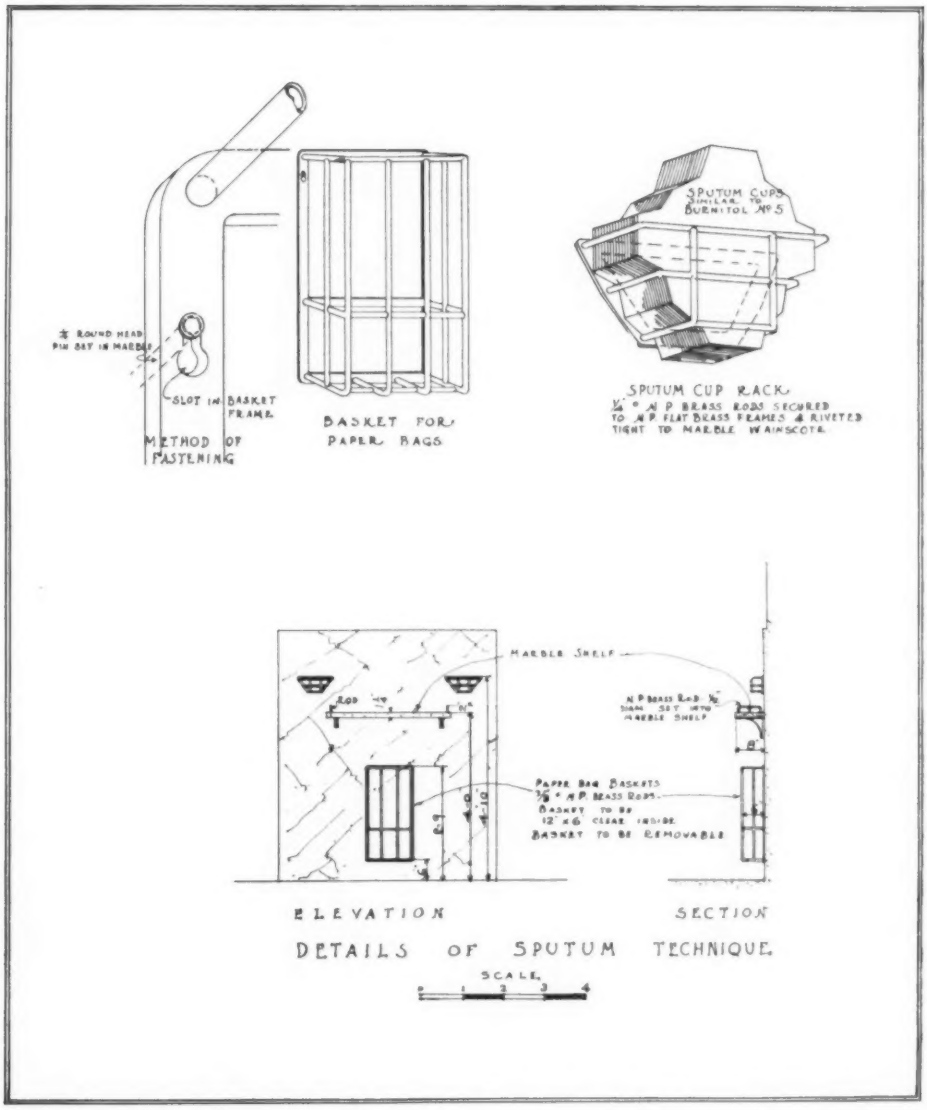
For bed cases, two methods of collecting a patient's sputum are in use. Formerly, the most common was to provide a special cup in which the patient spits; the cup being taken away at intervals by an attendant, who leaves a clean cup in its place. Generally, a metal cup with a stout paper lining, or "re-fill," is used; but it is not at all uncommon to find an ordinary enamelled cup being utilized for the purpose.

But, whatever kind of cup be used, the attendant must carry it to the utility room, empty it, and sterilize it at frequent intervals in a simple instrument sterilizer, which should always form a part of the fixed equipment for the utility room of the infirmary section of a sanatorium.

In a great many sanatoria today, however, the paper napkin is replacing the sputum cup for bed patients. Where paper napkins are used, the patient is given a generous supply and after expectorating into one, rolls it up and drops it into a paper bag at the bedside. At suitable intervals the bag is collected by an attendant and taken away; a fresh bag being, of course, substituted.

The usual method for keeping the paper bag in a position convenient for the patient is to pin it with a safety pin to the bedclothes at the side of the mattress. A much better plan is to provide a small wire basket, of the size of the bag, and to hang it either on the bedside table or on the side rail of the bedstead. The





DETAILS OF SPUTUM TECHNIQUE

basket should be of galvanized wire, so that it can be sterilized occasionally.

For the final disposal of the used paper refills and the paper bags containing the used paper napkins, two methods are available. Either they are placed in a covered receptacle of the garbage pan type (an enameled vessel is better than a galvanized iron one), which stands in the utility room and is taken once or twice a day to a central incinerator; or, the used refills and paper bags are placed directly into a local incinerator built into the wall of the corridor near the utility room. There are arguments in favor of each method, but the writer is inclined to favor the local incinerator.

For semi-ambulant and ambulant patients, the use of the paper lined metal sputum cup is almost universal. It may be well to explain that a patient is usually classed as "semi-ambulant" when he (or she) is able to dress and walk to the bath room and the dining room. Later on, as the patient's condition improves, he is able to take more and more exercise and becomes an "ambulant" case.

It is necessary, then, to provide at some convenient point a place where the patients in these categories can take out the used paper lining of their metal cups and replace it with a clean one. It is usual to arrange that this sputum technique station be close to the entrance, or perhaps in the entry itself, of the water section, so that the patient may wash his hands after changing the cup lining. (Of course, the metallic cup itself should be turned in every few days for sterilization.)

Fig. 1 of the accompanying illustration shows the method of providing for sputum technique adopted by the Supervising Architect of the Treasury Department of the United States, in some of the Government sanatoria now under construction. It will be noted that a recess sixteen inches deep and five feet six inches high is formed in the wall; the bottom of the recess being six inches above the floor line. The shelves shown should be of some impervious material, such as slate, marble or glass, and the recess should be lined with metal.

The lower shelf is shaped and prepared to receive a wire basket in which a paper bag is placed. An inch or two of dry sawdust is placed in the bottom of the paper bag and the used sputum cups are deposited in it. The procedure is that a patient deposits his metal cup on the shelf at the side of the basket, takes out the paper lining and then takes from the upper shelf a clean paper refill.

At intervals, an attendant takes away the paper bag and replaces it with a clean one.

Of course, if a local, built-in incinerator is provided, no arrangement for holding the large paper collecting bag is necessary, but merely a shelf on which the cups can be deposited and a shelf above it to hold the clean refills.

Fig. 2 shows another method of providing for sputum technique and was designed by Messrs. Schenck & Williams, architects, Dayton, Ohio, for the new tuberculosis unit to be erected on the grounds of the Central Branch of the National Home for Disabled Volunteer Soldiers in that city. As Mr. H. I. Schenck is the Supervising Architect for the Board of Managers for the National Home, this detail will be followed in the tuberculosis units to be erected at the Branch Homes at Marion, Indiana; Leavenworth, Kansas; Milwaukee, Wisconsin; Battle Mountain, South Dakota, etc.

In this case a square metal basket (nickel plated on brass), is hung on the wall by a slotted hole which enables it to be lifted off and taken away occasionally for sterilization. This metal basket is made to receive a standard paper bag of the kind furnished by hospital supply houses for this purpose. The glass shelf above is for the patient to rest his metal cup upon while changing the paper lining. The metal container hung diamond wise on the wall above the shelf is made to fit a standard paper lining, which is creased and cut so that a patient may fold it into the shape in which it will fit into the metal cup. As in the type of sputum technique station shown in Fig. 1, the paper bag has sawdust placed in the bottom of it and is taken away at intervals by an attendant.

It will be obvious that the actual details of a sputum technique station are susceptible of many variations; the main point to remember is that the station should not be in a dark corner, but in a well-lighted place. One of the aims of treatment in a sanatorium is to inculcate habits of personal hygiene with the object in view that, when a patient is restored to usefulness after a period of treatment, it has become habitual with him so to conduct himself that he is not a menace to his fellows.

In this connection it may be interesting to note that in going over some plans which were submitted recently by a Sanatorium Superintendent to the Institutional Construction Advisory Service maintained by the National Tuberculosis Association for the benefit of architects and sanatorium authorities, it was pointed out that a sputum technique station had not been provided, the superintendent decided to locate it in the main corridor. It appears that the institution (a city sanatorium) makes a feature of health talks to friends of the patients who are allowed to visit the institution on Sunday afternoons and the superintendent deemed that this evidence of the great care taken in disposing of the sputum of the patients would form a valuable object lesson to the visitors.

[The foregoing article, prepared by T. B. Kidner, was contributed by the Institutional Construction Advisory Service of the National Tuberculosis Association, which is the national headquarters of the fight against tuberculosis in this country. From Thanksgiving Day until Christmas there will be conducted the annual Christmas Seal Sale, which provides the funds for the local, state and national educational work which is slowly but surely ridding the United States of the "Great White Plague."]

Hygienic Exposition at Strasbourg in 1923.

In 1923 it will be one hundred years since the French chemist, Louis Pasteur, was born. It is planned to organize, under the auspices of the Institut Pasteur of Paris, the University of Strasbourg, and the city of Strasbourg, an Interal'ied Hygienic Exposition at Strasbourg in memory of the famous scientist

at the place where he was professor of chemistry from 1849 to 1854. A feature of this exposition, which will last from May to October, 1923, will be its division on Hygienic Towns, presided over by Vice-Mayor Keppi of Strasbourg. The division will show the latest achievements in the general planning of towns and streets, laborers' gardens, drainage, street-cleaning, removing of garbage, building of houses, arranging of flats and furniture, providing of air, heat, light and water, public and private bathing, the care of the body, how to dress properly, funerals, cemeteries, etc.

Individuals, firms, associations, societies, etc., desiring to secure stands or being otherwise interested in this fair but not having received any personal invitation are asked to apply to the following address:

Exposition Interalliée d'Hygiène,
Strasbourg 1923,
Section: Hygiène Urbaine,
1, Quai Lezai-Marnésia, Strasbourg.

French Architects to Teach Design in America.

Two distinguished French architects, Albert Ferran and Jean Jacques Haffner, both of them winners of the Grand Prix de Rome, have accepted invitations to come to this country to teach. Mr. Ferran will have charge of design at the Massachusetts Institute of Technology, while Mr. Haffner will hold the corresponding professorship at the School of Architecture at Harvard. The departments at Harvard and the Massachusetts Institute of Technology engage in "conjunctive problems" in architecture, which will give Mr. Ferran and Mr. Haffner a chance to work together. They speak English fluently and are close friends.

Albert Ferran was born at San Francisco in 1886 of French parents, entered the Ecole des Beaux Arts in 1904, took his degree in 1910, and won the Grand Prix de Rome in 1914. He was a pupil of Victor Laloux, and spent a large part of the five years of war at Salonica with the French troops. While there he made measured drawings of the Monastery Laura at Mount Athos, and from these he is now doing the principal work for his "Envois de Rome."

Jean Jacques Haffner is an Alsatian, born in Stuttgart some 36 years ago; and from 1907 to 1913 studied at the Beaux Arts. He was Logiste for the Grand Prix on two separate occasions, and won first prize in three competitions in the Beaux Arts. Like Ferran, he was a pupil of Victor Laloux. He served during the war for four years and was severely wounded. At the end of the war he was awarded the vacancy in the Villa Medici at Rome to replace one of the holders of the Grand Prix de Rome who had died during the war. By virtue of this position, which gives him the status of a Grand Prix winner, he holds the honorary position as government architect for the French town of Albert. He is now practicing architecture in Paris.

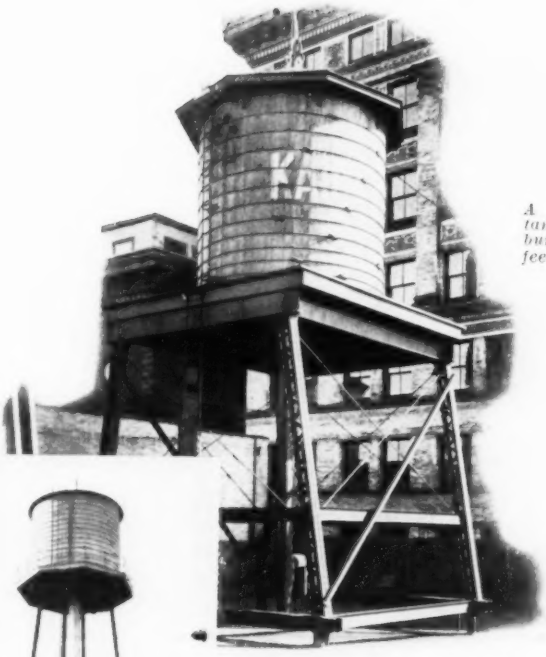
Fourth Annual Own Your Home Exposition.

The executive committee of the Fourth Annual Own Your Home Exposition announces that the show will be held in the 69th Regiment Armory, New York City, Lexington Avenue and Twenty-fifth Street, from April 22 to 30. The committee is composed of John A. Baldwin, representing the real estate interests; Arthur E. Lane, of the Arthur E. Lane Lumber Corporation; William D. Carter, president of the Metropolitan League of Savings and Loans Associations; Milton Dana Morrill, representing the architectural interests; David E. Breinig, of Breinig Brothers, and Carl B. Eimer, of the Amsterdam Development and Sales Company.

Sub-committees are being formed on architecture, building and finance, building materials, clay products, concrete house and cement products, household economics, heating and ventilating, houses and home sites, interior decorating, landscape architecture, lumber and wood products, publicity, sanitation, and savings and thrift.

The sub-committees are to aid in directing the policy of the exposition, and will pass on all exhibits. Every phase of home planning, financing, building, equipping, furnishing and landscaping will be shown in an effort to encourage building and to increase the membership of savings and loans societies.

At the 1921 exhibition of the American Institute of Architects two houses were shown by Reginald D. Johnson that were generally admired. These were the residence of J. P. Jefferson, at Montecito, Cal., which was awarded the blue ribbon; and the residence of C. F. Paxton, at Pasadena, Cal. The latter was published in our October issue with the erroneous statement that it was the house premiated by the Institute. The Jefferson residence will be published in an early number of THE ARCHITECTURAL RECORD.



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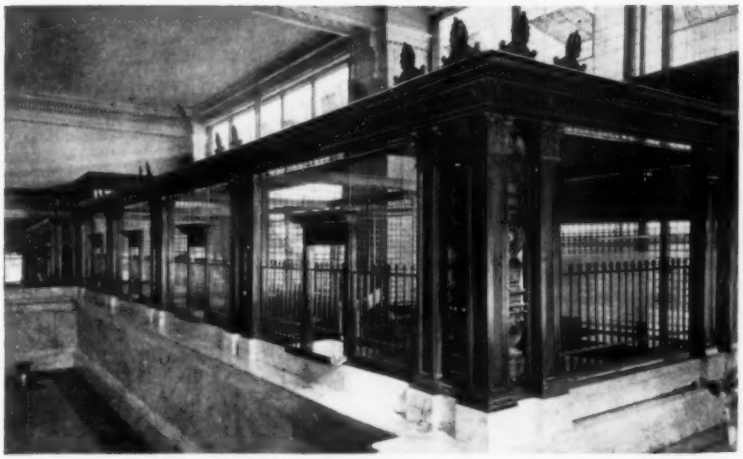
The Architectural Record—December, 1921—No. 279. Published Monthly—$3.00 a year—119 West 40th St., New York, N. Y. Entered as second class matter May 22, 1902, at the Post Office at New York, N. Y., under the Act of March 3, 1879.

Ambrac Structural Shapes



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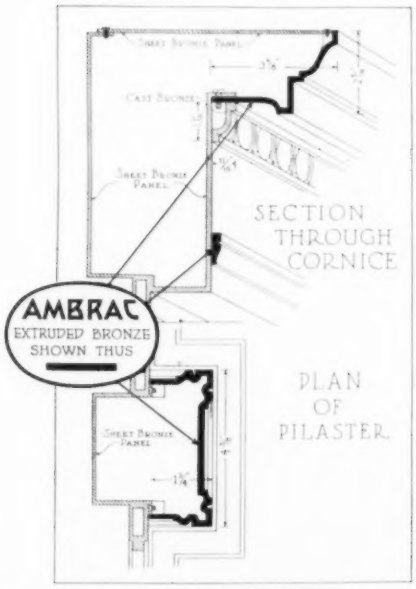

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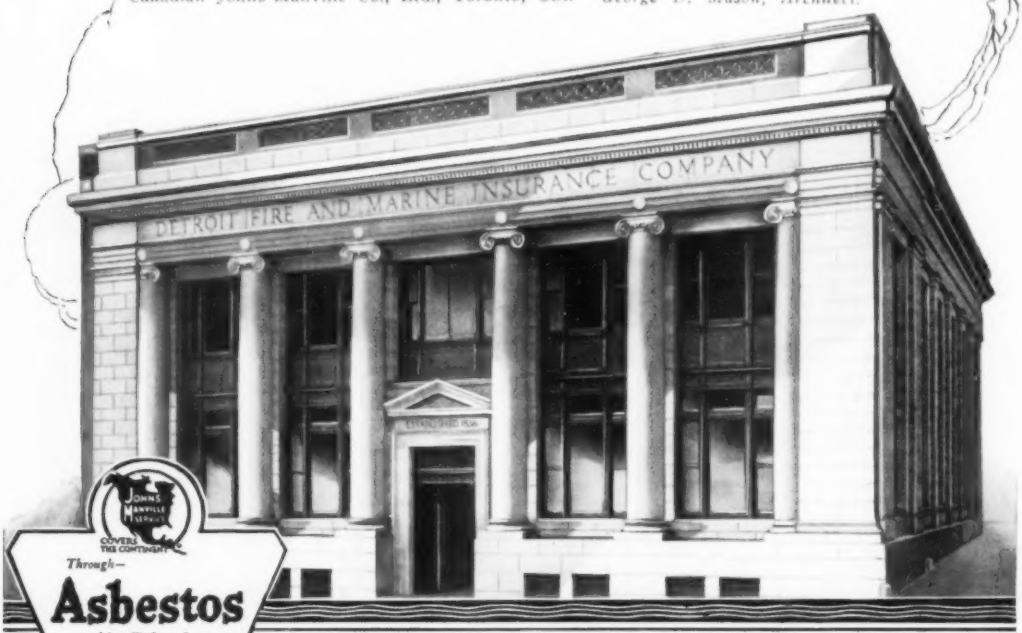

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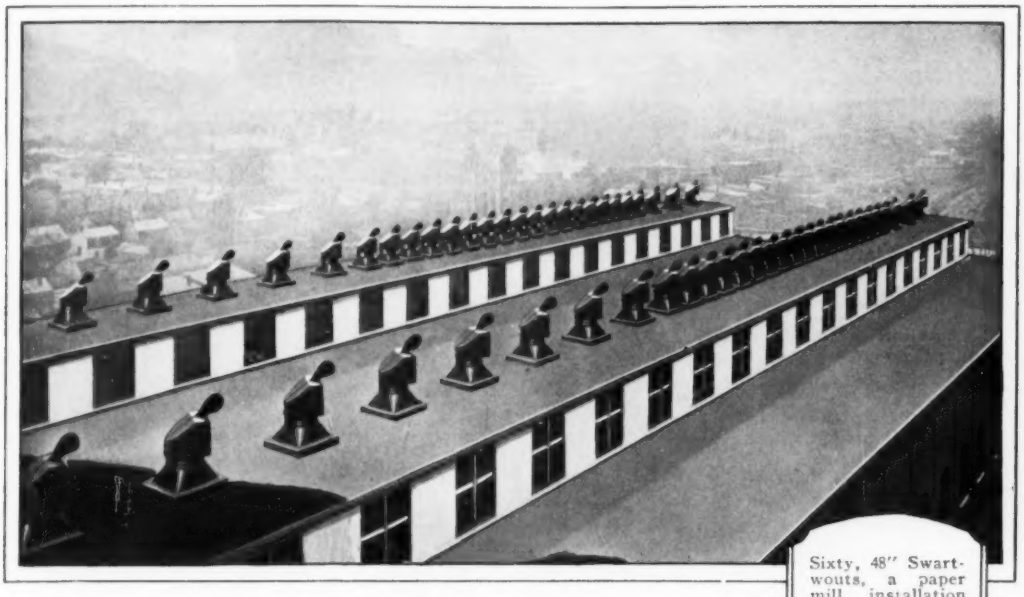

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ACOUSTICS. Sound Reflections. Junius H. Stone Corporation, 1400 Broadway, New York. Vol. 1, No. 1. 5½x8 in. 12 pp. Illustrated.

ACOUSTICS. Akoustolith as Related to Architectural Acoustics. R. Guastavino Co., Woburn, Mass. 10x13 in. 16 pp. Illustrated.

AIR HANDLING. "The Climate Doctors." B. F. Sturtevant Co., Hyde Park, Boston, Mass. 3½x6 in. 12 pp.

BELLS. Meneely Bells. The Meneely Bell Co., 22-26 River St., Troy, N. Y. New York Office, 220 Broadway. 5⅜x4⅛ in. 20 pp. Illustrated.

BOILERS, HEATING. Kay-Sola Gas Fired Heating Boilers. Folder No. 51. The Solar Engineering Co., 505 Fifth Ave., New York. 4x8½ in. 8 pp. Illustrated.

CLOCKS. Seth Thomas Tower Clocks—Catalogue No. 7. Seth Thomas Clock Co., Thomaston, Connecticut. 8x10½ in. 72 pp. Illustrated.

CLOCKS. Seth Thomas Electric Secondary Clocks. Catalogue No. 701. Seth Thomas Clock Co., Thomaston, Connecticut. 6x9 in. 20 pp. Illustrated.

CLOCKS. Electric Clocks. Bulletins 1, 2 and 3. Radio Time Service, Incorporated, 161 Devonshire St., Boston, Mass. 8½x11 in. 4 pp. each. Illustrated.

COATINGS, PROTECTIVE. M-R—The Story of Waterproof Plastic Protective Coatings. Mitchell-Rand Mfg. Co., Waterproofing Dept., 18 Vesey St., New York. 8½x5½ in. 20 pp. Illustrated.

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COMPRESSORS. Worthington Unaflow Steam Driven Compressors. Bulletin L-542. Worthington Pump & Machinery Corporation, 115 Broadway, New York. 6x9 in. 24 pp. Illustrated.

CONVEYORS, ASH. Green Steam Jet Ash Conveyors. Green Engineering Co., East Chicago, Indiana. 4x9¼ in. 8 pp. Illustrated.

COPPER & BRASS. Bulletin No. 3 of the Copper & Brass Research Association, 25 Broadway, New York. 8½x11 in. 12 pp. Illustrated.

DISH-WASHING MACHINES. Victor Haustetter Electric Dish-Washing Machines. F. G. Street & Co., Inc., 132 Nassau St., New York. 8½x11 in. 4 pp. Illustrated.

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FINISHES, WOOD. "Various Woods Finished With Johnson's Artistic Wood Finishes." S. C. Johnson & Son, Racine, Wisconsin. 5½x10¾ in. Finishes shown on actual samples of wood. 14 pp. Illustrated.

FLOOR CONSTRUCTION. Republic Two-Way Fireproof Floor Construction. Republic Fireproofing Company, Inc., 116 West 32d St., New York. 8x11 in. 28 pp. Illustrated.

FLOORS, BLOCK. Report of an Investigating Committee of Architects & Engineers on Hastings Asphalt Block Floors. The Hastings Pavement Company, 25 Broad Street, New York. 8½x11 in. 8 pp. Illustrated.

FLOORS, BLOCK. ZR-2. The Navy Dirigible Hangar, Lakehurst, N. J. The Hastings Pavement Co., 25 Broad St., New York. 8½ x11 in. 6 pp. Illustrated.

FLOORING. Marbleloid, the Modern Flooring for Hospitals. The Marbleloid Company, 461 Eighth Avenue at 34th St., New York. 8½x 11 in. 4 pp. Illustrated.

GLASS, LIGHTING. Macbeth Lighting Glass. Catalogue No. 112. Macbeth-Evans Glass Company, Pittsburgh, Pa. 6x9 in. 64 pp. Illustrated in color.

GLASS CONSTRUCTION. Keppler Rooflight Constructions. Bulletin No. 207. Frederick L. Keppler, 1799 First Avenue, New York. 8½x11 in. 4 pp. Illustrated.

GRILLES, WROUGHT STEEL. H. & C. Quality Grilles. Hart & Cooley Co., Inc., New Britain, Connecticut. 6x9 in. 16 pp. Illustrated.

HARDWARE, WINDOW. Standard Comfort Window Hardware. Standard Comfort Window Corporation, 426 Broome St., New York. 6⅛x9¼ in. 12 pp. Illustrated.

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HEATERS, UNIT. Engineers' Data Book of Wing-Scruplex Unit Heaters. L. J. Wing Mfg. Co., 352-362 West 13th St., New York. 9x11 in. 7 pp. Illustrated.

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LIGHTING, ELECTRIC. Brascolite Bulletin No. 3 Architectural Series, "Schools, Colleges & Y. M. C. A. Buildings." Luminous Unit Co. Division of St. Louis Brass Mfg. Co., St. Louis, Missouri. 7¾x10½ in. 44 pp. Illustrated.

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MATERIALS, BUILDING. Hand Book Describing Berloy Building Materials. First Edition. The Berger Manufacturing Co., Canton, Ohio. 4½x6⅝in. 400 pp. Illustrated and bound in boards.

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PILES. Raymond Concrete Piles. Raymond Concrete Pile Company, 140 Cedar St., New York. 3½x6¼ in. 12 pp. Illustrated.

PRESERVATIVES, WOOD. The Annual Charge Against Treated Timber. Bulletin No. 40. By F. S. Paddock, Chemical Engineer. The Protexol Corporation, 34 Barclay St., New York. 6x9 in. 28 pp. Illustrated.

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TILES. Basic Specifications for Tilework & Related Documents. Publication No. K-300. Associated Tile Manufacturers, Beaver Falls, Pa. 7½x10½ in. 38 pp.

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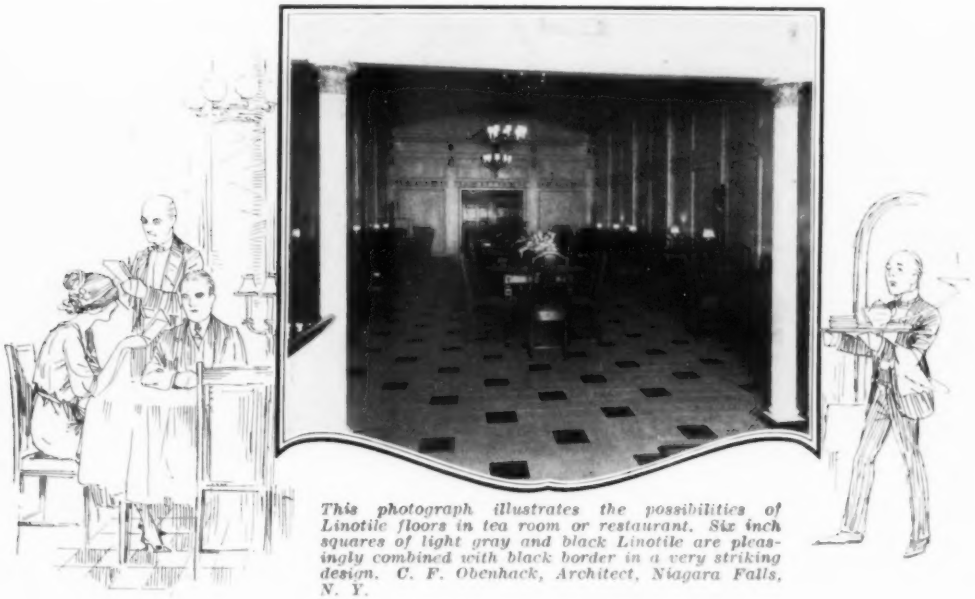
WINDOWS, METAL. Pomeroy Austral Hollow Metal Fire Retardant Windows. Bulletin No. 2201. The S. H. Pomeroy Company, Inc., 282-296 East 134th St., New York. 8½ x11 in. 8 pp. Illustrated.

WIRES & CABLES. Specifications for Extra Grade Commercial Code, Intermediate and Extra High Grade Rubber Insulated Wires and Cables. Atlantic Insulated Wire & Cable Co., Stamford, Conn. 8½x11 in. 3 pp. each

WOODWORK. General Catalogue No. 185 of Gould Quality Woodwork. Gould Manufacturing Co., Oshkosh, Wisconsin. 5¼x7½ in. 288 pp. Illustrated.



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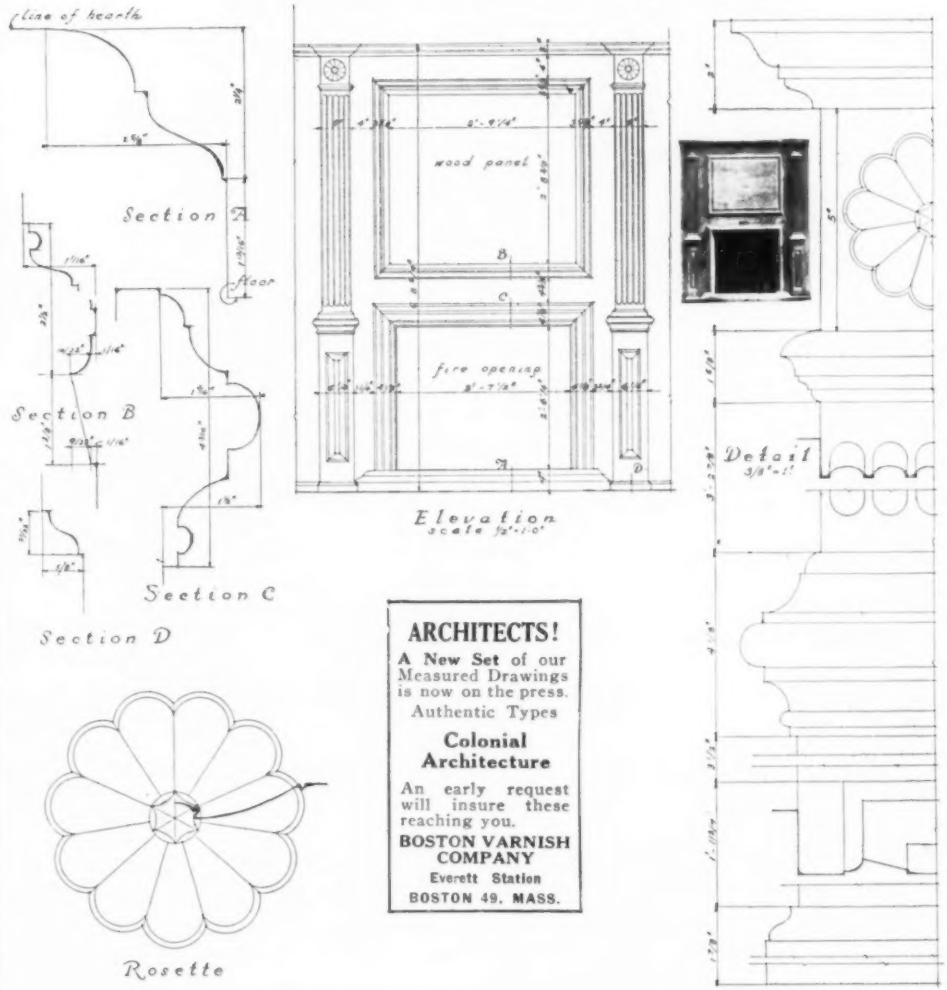

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"The Seven Lamps of Architecture"

Experienced Building Official on Brick Veneer

Reporting recently on this type of construction which had been proposed for two-story schools, a building official of a western city has this to say:

"I find the type of building recommended in said document (brick veneer on frame) is a dangerous type of construction for the following reasons:

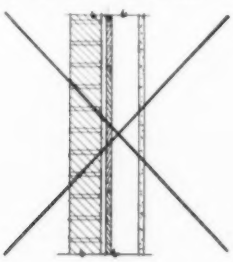
"Should an earthquake occur during recess or while children were playing on the grounds, the veneering would shake off and, no doubt, seriously injure many of the children.

"A solid masonry wall will confine a fire for more than a day, and about one hour is the limit to the veneered wall. Also, when fighting a fire the studs burn through and the veneering collapses, making it very dangerous to firemen.

"Worst of all, veneered buildings are subject to dry rot. In all of my experience I have yet to find a veneered building twenty years old which has not been subject to dry rot or has much structural value left.

"Under favorable conditions a brick veneered building does well to last twenty years. Many reach initial failure before this time. In fact under ordinary conditions the housing of children in any two-storied veneered building which has stood sixteen to eighteen years is a dangerous undertaking.

"With the above in mind I cannot recommend a veneered building. Also, many of the bonds are issued for a period of forty years, yet the veneered school building will scarcely last twenty years at best."



BRICK VENEER ON FRAME

NOT FIRE-RESISTIVE FROM INSIDE
DIFFICULT TO FIGHT FLAMES
MAY COLLAPSE ON FIREMEN
NON-PERMANENT
DECEPTIVE, UNSOUND CONSTRUCTION

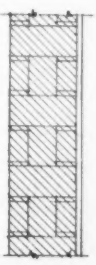
Have You a Copy of this Brick Manual?

For 25 cents only, we will gladly send this 72-page construction manual—*"Brick, How to Build and Estimate."* Some of the subjects covered are: The Ideal Wall brick in fire-resistive and slow burning construction; brick in fire and party walls; compressive strength of brick; fire-resistiveness of column coverings; cement and limes; sand; mortar colors; selection and preparation of mortar; bonds; joints; fireplaces and chimneys; brick construction in freezing weather; and many other topics. If the local brick manufacturer cannot supply you, write The Common Brick Industry of America, 1318 Schofield Building, Cleveland, Ohio.

Real Brick Construction Costs Less Than Sham

Walls of traditional solid brick construction, generally, cost no more than brick veneer on frame. The Ideal Wall costs less.

For data on Ideal Wall and other information on brick, see Sweet's Architectural Catalog, 1921, pages 107-114. The Common Brick Industry of America, 1318 Schofield Building, Cleveland, Ohio.



SOLID OR IDEAL WALL

PERMANENT
FIRE-RESISTIVE
SAFE FOR FIREMEN
HONEST, SOUND CONSTRUCTION

BRASCOLITE

PATENTED AND TRADE MARK REGISTERED

The Ideal Light for Every Purpose

TYPE A.F.

Type A.F.—With wide, all white glazed porcelain enameled reflector and bowl of heavy pressed white glass of low absorption.
Type A.F.B.—Same, with reflector band finished in leather bronze.

Permits Wiring Building for 1320 Watts for Each 13-Outlet Circuit

Saves cost of running wires for extra circuits.

According to the Underwriter's Laboratories the capacity of a circuit intended for lighting is limited to 13 outlets with a total capacity of 660 watts with the proviso that, where the circuit wires enter the sockets, or wires of equivalent size to the circuit wires lead to the sockets, the wattage capacity of the circuit may be made 1320 watts rather than 660, the limitation as to outlets per circuit remaining at 13.

In view of the fact that BRASCOLITES are arranged for either direct connection to the circuit wires or wire of No. 14 B. & S. size furnished for the wiring, it is permissible when using BRASCOLITES, to arrange circuits with an allowable capacity of 1320 watts, thus materially reducing the number of circuits for the lighting of any area.

The same wiring arrangements are permissible with Elites and Aglites. It should be understood, however, that this 1320-watt capacity is not permitted where fixture wire of a size smaller than No. 14 is used.

Brascolite's efficiency and economy have made it the largest selling lighting fixture in the world. Under present-day building conditions it is the light to specify for economy as well as for service.

Made in a wide range of sizes and designs, harmonizing with any architectural design or period, Brascolite is the ideal light for every purpose.

Our catalogue No. 8 pictures and describes the Standard Brascolite line. May we send you a copy? Our Engineering Department is at your service for any special requirements.

Prepared to estimate on and produce materials of manufacture in

Metal Stampings
Porcelain Enameling
Machining and Spinning
Brass and Aluminum Founding
Electroplating and Polishing

THE BRASCOLITE COMPANY

Division of the St. Louis Brass Manufacturing Company, St. Louis, Mo.

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SEE OUR CATALOGUE IN SWEET'S

Canadian Distributor: **Northern Electric Company** LIMITED Montreal

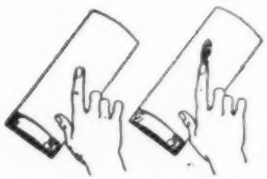
Flows easily from the brush

Three points to consider—

when you specify paint for ceilings and walls

1. **Will it turn yellow—or remain white?**
2. **Will it flake off—or stay on?**
3. **Will it collect dirt—or stay clean?**

Barreled Sunlight **Flat or egg-shell finish paint**



Try this test yourself

Rub your finger over the smooth, lustrous surface of Barreled Sunlight. It will not leave a mark. Then note the smudge your finger leaves on the porous surface of flat or egg-shell finish paint.

ANY white paint looks well when first applied—but how long will it stand up under actual service conditions? How will it look after it has been on the walls for six months or a year?

These are the questions you have got to answer before you choose the paint for industrial buildings, kitchens, restaurants, or any interiors where light and cleanliness are desirable.

A flat or egg-shell finish paint has a rough, porous surface that is bound to collect dust and dirt. Once soiled it can never be properly cleaned. Washing or brushing merely drives the dirt still deeper into the thousands of little pores and crevices.

In many paints, particularly flat paints, there is not enough non-volatile liquid, or "binder," to get a proper grip on the wall. Such paints chip off and scale, giving added expense instead of service.

Ordinary gloss surface paints soon turn yellow, thus robbing you of light and necessitating frequent repainting.

By our exclusive process we have produced a paint which avoids all these dangers—a lustrous paint of intense and lasting whiteness.

Remains white longest

We guarantee that Barreled Sunlight—the Rice Process White—will remain white longer than any gloss paint or enamel, domestic or foreign, applied at the same time, under the same conditions. Its smooth, lustrous surface is highly resistant to all forms of dust and dirt, and may be washed clean, like tile.

May be applied by brush or spray method. Sold in barrels, also in cans.

Write for specifications.

U. S. GUTTA PERCHA PAINT CO.
22 Dudley Street, Providence, R. I.

See our catalog in Sweet's pages 1092-1093

Barreled Sunlight

The Rice Process White

RITZ CARLTON HOTEL, ATLANTIC CITY, N. J. SHOWING ONE OF THE CRANE EQUIPPED BATHROOMS

WARREN & WETMORE, ARCH., N. Y. C.

WELLS & NEWTON CO., PLG. CONT.

IN the appointments of the guest chambers of modern hotels, the bathroom equipment is an item of first importance.

CRANE

HOTEL PLUMBING FIXTURES

embody all the essential qualities of comfort and satisfactory service, and can be installed in a comparatively small space.

You are cordially invited when in Atlantic City to make the Crane Exhibit Rooms (1105-1107 Boardwalk) your headquarters. We will be glad to receive any mail addressed to you in our care.

1855——CRANE CO.——1921

836 South Michigan Avenue, Chicago

Branches in 65 leading cities

Works—Chicago and Bridgeport

Linoleum, yes, but not the kitchen variety. A plain gray, waxed and polished, to set off the fabric rug and blend with the paneled walls.

Investing Quiet Charm with a Touch of Unusualness

WHY intrude upon the quiet charm of soft gray walls the discordant yellow tones of ordinary floors? With a floor of Armstrong's Plain Gray Linoleum you can not only have complete color harmony, but a touch of restrained unusualness and a background that will bring out all the beauty of fabric rugs. Moreover, a linoleum floor is quiet, non-slippery and never requires expensive refinishing. When cemented down over felt paper, it is smooth, water-tight and will last for years.

Armstrong Cork Co. *Linoleum Department* *Lancaster, Pa.*

Armstrong's Linoleum

for Every Floor (A) *in the House*

R55

A portfolio of colorplates showing some unusually charming interiors built on appropriate linoleum floors will be sent without cost or obligation. Ask for the Architect's edition of "Speaking of Floors."

A Correction:

In the Johns-Manville advertisement which appeared on page 19 of the November issue of The Architectural Record, this paragraph appeared:

> "Asbestos Roofing, being all mineral, is subject to ***more*** of the inherent defects found in so-called 'rag felt' roofings."

This statement, because of a Printer's mistake, reverses the intended meaning, and we are glad to make this correction. This paragraph should read:

> "Asbestos Roofing, being all mineral, is subject to ***none*** of the inherent defects found in so-called 'rag felt' roofings."

When You Plan a Garage

THE greatest advantage of McKinney Complete Garage Sets to Architects and Builders is that they promote rather than limit a wide range of design. When you plan a garage with these sets in mind, you know your plan will be followed down to the last line and your client satisfied.

These sets contain all the hardware necessary for garage doors—even the track. With drawings and directions, they are packed complete in a box—no odds and ends to buy afterward. The doors may be the swinging, sliding-folding, or, if space is particularly limited, "around-the-corner" type. There is a set for any size or any style doors you wish used.

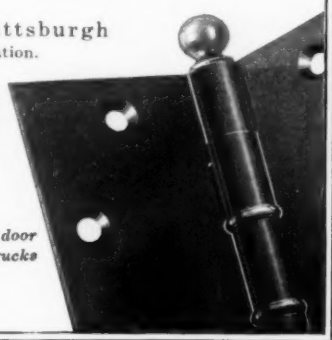
McKinney Complete Garage Sets have been given the same careful attention that is responsible for the worth and work of McKinney Hinges and Butts. Fifty years of association with the development of builders' hardware serves advantageously in meeting the needs of the Architect and Builder.

McKinney hung garage doors are pictured and explained in book form. This book shows how easily the sets are installed and how they make better looking, stronger and more protective doors possible. It not only points a way toward lower building costs but illustrates the possibility of varied designs. This book and the McKinney Catalog will be forwarded upon request.

McKINNEY MANUFACTURING CO., Pittsburgh
Western Office, Wrigley Bldg., Chicago. Export Representation.

McKINNEY
Hinges and Butts

Also manufacturers of McKinney garage and farm building door hardware, furniture hardware and McKinney One-Man Trucks



Typical examples of catalogues showing structural details drawn to scale are those of the Philip Carey Company, The Fairfacts Company, Incorporated, the Richards - Wilcox Company, The Watson Manufacturing Company, Allith-Prouty Company and the Reliance Fireproof Door Company—to mention only a few. George Rackle & Sons Company show a catalogue with scale drawings of architectural details.

For thorough presentation of descriptive and specification data note the catalogue of the Kelley Island Lime and Transport Company.

Types of catalogues giving general information of the highest order are those of the Common Brick Manufacturers' Association of America and the National Building Granite Quarries Association.

Familiarize yourself with the new "Sweet's" and extract **VALUE** *plus* from its pages every day.

SWEET'S CATALOGUE SERVICE, Inc.

119 West Fortieth Street, New York

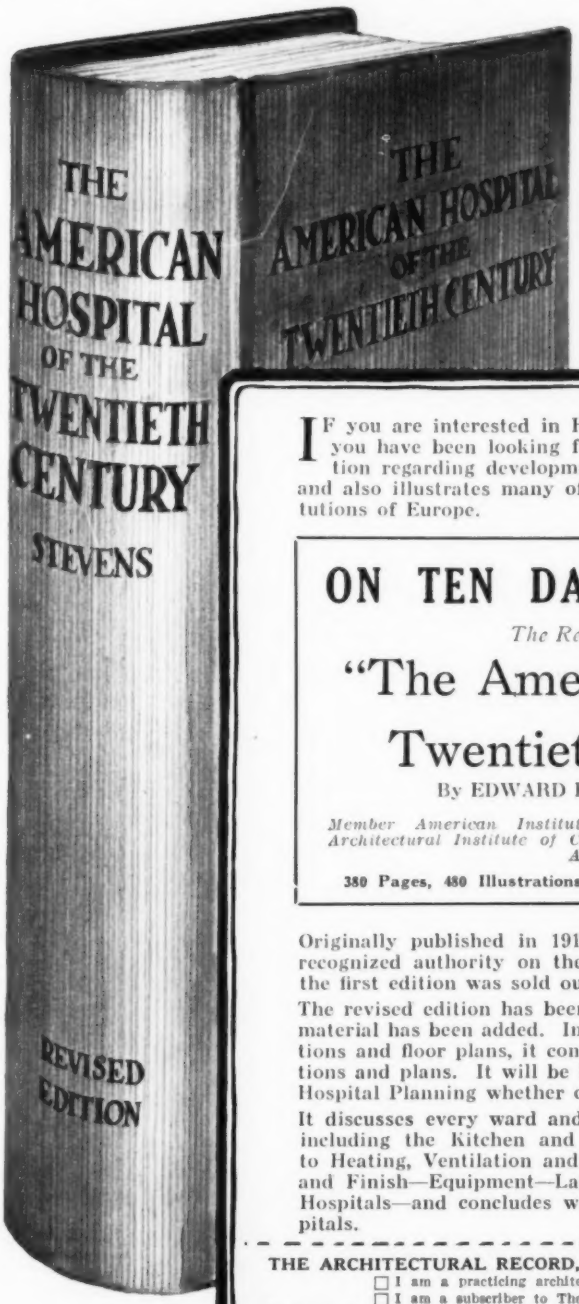
ROCKPORT SEA-GREEN GRANITE, eight cut finish, was used exclusively in the construction of the Winters National Bank, Dayton, Ohio. This is but one of the many splendid and recent undertakings where ROCKPORT GRANITE has been specified and used. The building was designed and erected by FRANK HILL SMITH, INC., ENGINEERS, New York City and Dayton, Ohio.

See "Sweet's" for reproductions of Rockport Granite in color

ROCKPORT GRANITE COMPANY

C. Harry Rogers, Treasurer and General Manager

ROCKPORT :: :: :: :: MASSACHUSETTS



"—the last word on hospital planning"

IF you are interested in Hospital Planning, here is the book you have been looking for. It contains the latest information regarding developments in American hospital planning and also illustrates many of the most successful modern institutions of Europe.

ON TEN DAYS' APPROVAL

The Revised Edition of

"The American Hospital *of the* Twentieth Century"

By EDWARD F. STEVENS, Architect

Member American Institute of Architects. Member Royal Architectural Institute of Canada. Member American Hospital Association.

380 Pages, 480 Illustrations and Floor Plans. Price $7.50 Net

Originally published in 1918, this book promptly became the recognized authority on the subject of Hospital Planning and the first edition was sold out in a little over two years.

The revised edition has been entirely re-written and much new material has been added. Instead of 274 pages with 350 illustrations and floor plans, it consists of 380 pages with 480 illustrations and plans. It will be invaluable to everyone interested in Hospital Planning whether or not he possesses the first edition.

It discusses every ward and department of a modern hospital, including the Kitchen and Laundry, devotes special chapters to Heating, Ventilation and Plumbing—Details of Construction and Finish—Equipment—Landscape Architecture as Applied to Hospitals—and concludes with a chapter devoted to War Hospitals.

THE ARCHITECTURAL RECORD, 119 West 40th St., New York. A.R. 12-21

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Send me on approval a copy of "The American Hospital of the Twentieth Century" (Revised Edition). I agree to remit $7.50 for it or to return it postpaid within 10 days.

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NOTE.—If not a subscriber to The Architectural Record or a practicing architect, give business references in margin. Books sent on approval in U. S. A. only.

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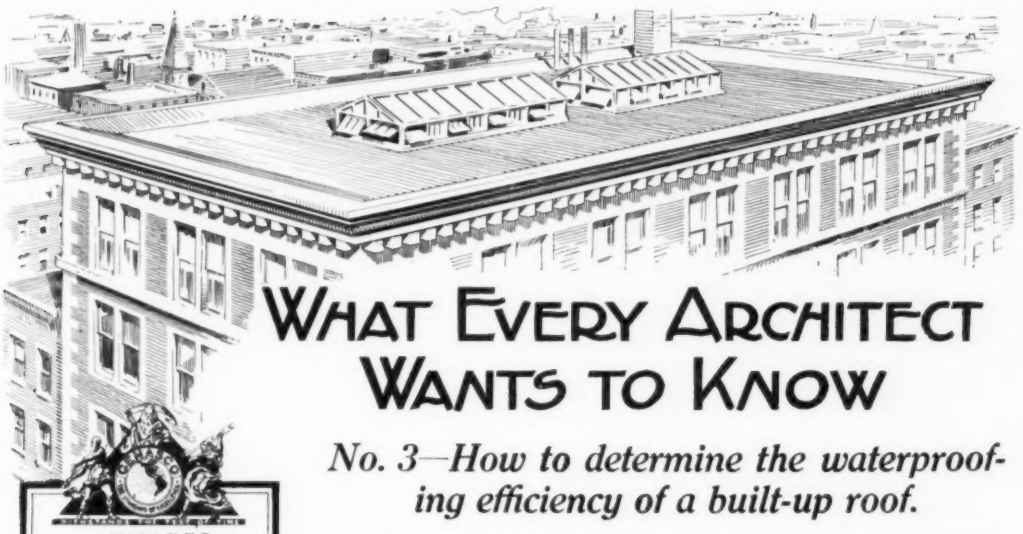

WHAT EVERY ARCHITECT WANTS TO KNOW

No. 3—How to determine the waterproofing efficiency of a built-up roof.

Waterproofing efficiency—the real value of any built-up roof—is not a matter of weight or thickness. They affect its cost only.

Waterproofing efficiency depends on the kind of waterproofing material used, its percentage by weight and what is used to reinforce it.

That is why an architect must know whether the waterproofing factor is Trinidad Lake Asphalt, oil asphalt or coal tar residuum.

Also whether the reinforcing factor is all-rag felt, paper-rag felt or asbestos felt.

STANDARD TRINIDAD Built-Up Roofing contains 85 per cent by weight of TRINIDAD LAKE ASPHALT—a product storm-beaten and seasoned in the tropics for ages—the most effective waterproofing material known to science.

STANDARD TRINIDAD is reinforced by 15 per cent by weight of all-rag felt—chosen because of its great tensile strength, mullin strength and power of absorption.

STANDARD TRINIDAD requires no mineral surfacing. That's why it weighs only 150 pounds per square against 625 pounds for mineral-surfaced roofing—why it is applied in six labor operations, or only one half required for a mineral-surfaced roof.

Complete specifications for applying STANDARD TRINIDAD are supplied architects free on request. Write for them before you specify another built-up roof.

GENASCO LINE

Trinidad Lake Asphalt (For streets and roofs)
Standard Trinidad Built-Up Roofing
Bermudez Road Asphalt (For road building)
Genasco Roll Roofing
Genasco Sealbac Shingles
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Genasco Vulcanite Mastic Flooring
Genasco Acid-Proof Paint
Genasco Industrial Paint
Genasco Boiler Paint
Genasco Asphalt Putty
Genasco Asphalt Pipe Coating
Genasco Asphalt Fibre Coating
Genasco Tile Cement
Genasco Waterproofing Asphalt
Genasco Waterproofing Felts and Fabrics
Genasco Battery Seal Compound
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Genasco Base Oils
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Genasco Motor Oils
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Genasco Stringed Felt
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Asphaltic Roofing, Flooring, Paints and Allied Protective Products

The Sharp Rotary Ash Receiver

For the Public Building Or the Private Residence

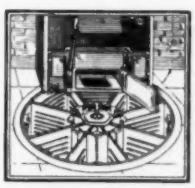
THIS ash disposal device is just as necessary in the public building as it is in the home. It provides a cleaner, more spacious cellar for storage purposes, it eliminates fire risks and reduces the labor of shovelling ashes. Ashes are no longer a bother when a Sharp Rotary Ash Receiver is installed.

It is necessary to remove the ash cans only once in a few weeks. For apartments, residences, hotels, schools and office buildings it is an economy and a necessary convenience.

Send for copy of our descriptive catalog.
Territory now being established. Write for Agency.

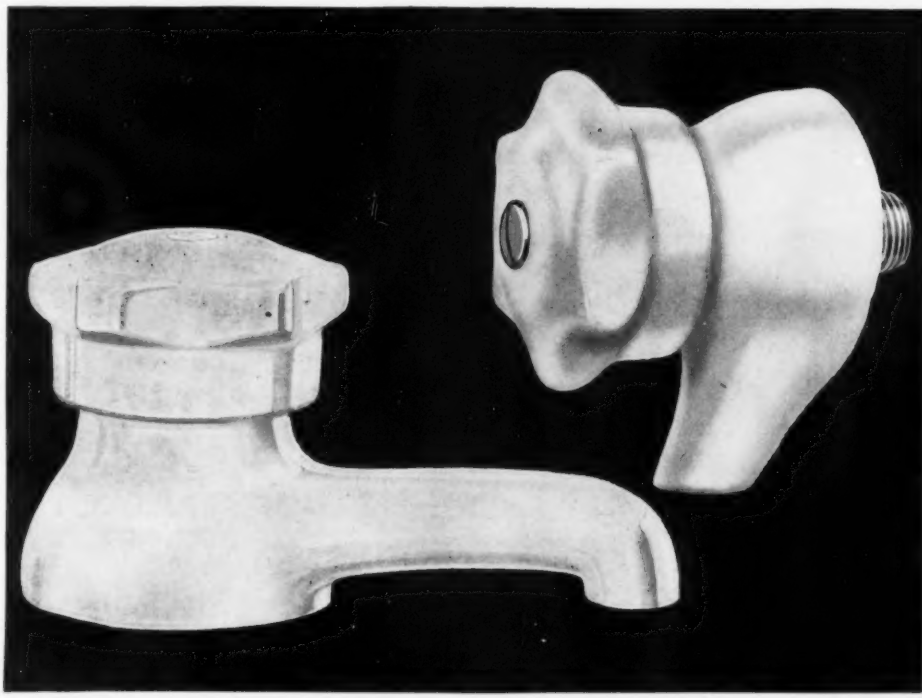
Sharp Rotary Ash Receiver Corp.
Dept. 756
396 Bridge Street
Springfield, Mass.

The cellar as clean as



the rest of the house.

SEE OUR CATALOGUE IN SWEET'S



For Bathroom and Kitchen

BATHROOMS and kitchens that are all-white are not a fad. They are refinements of sanitation—visible evidence that what looks clean actually **is** clean. The beauty of white cleanliness is outside the realm of style.

ALLWITE Basin Cocks and Sink Bibbs remove the last spots of metal from all-white bathrooms and kitchens. They are being chosen more and more for well made homes of all kinds.

They last. Their vitreous china surface is practically unbreakable. They serve faultlessly. QUICK-PRESSION mechanism, opening to full flow in a quarter turn, sees to that.

We suggest them for the next residence you design

The CENTRAL BRASS MFG. CO. of CLEVELAND

"HOME OF QUICK-PRESSION PATENTED FAUCETS"

In the Du Pont Hotel and Office Building, Wilmington, Del.
Architects: Du Pont Engineering Dept., Wilmington, Del.
Plumbing Contractors: Alexander Bryant Co., New York.
Plumbing Jobbers: Speakman Company, Wilmington, Del.

MADDOCK

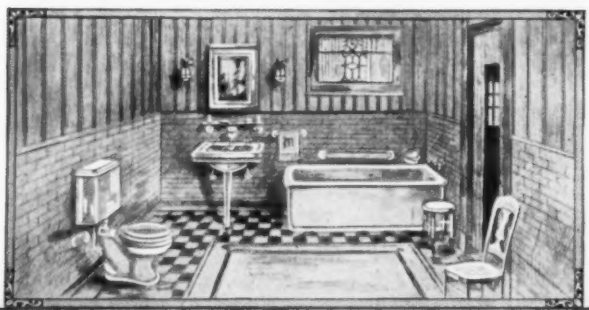
Plumbing equipment that costs less in the long run

The Du Pont Hotel and Office Building, modern in design and in construction, is modern also in sanitary appointments. It is equipped throughout with Thomas Maddock plumbing fixtures.

Plumbing fixtures that save labor throughout a lifetime of service are worth more than the ordinary kind. Yet, in the long run, such equipment costs less because it saves the repair bills that are invited when inferior fixtures are installed. That is one reason why Maddock plumbing fixtures are used in so many of the country's finest buildings.

Any architect who does not have a complete file of Maddock literature, should write for our architect's catalog which describes fully the latest Maddock fixtures suitable for home, public building, medical and other special requirements.

Thomas Maddock's Sons Company, Trenton, N. J.
OLDEST • SANITARY • POTTERS • IN • AMERICA — ESTABLISHED 1859
Manufacturers of sanitary earthenware plumbing fixtures for bath, kitchen and laundry needs in the home, also sanitary ware for medical, industrial, commercial and public building installations
Branches: New York – Philadelphia – Chicago – San Francisco – St. Louis



The fixture shown in the panel above is the Madera-Silent which is made throughout, excepting the white celluloid-covered seat, of vitreous china.

Massive in appearance, strong in construction, silent in operation and "all white" in color, this fixture combines advantages that will add character to any bathroom.

First in the industry — foremost since

Photograph showing Ja-Nar installed over radiator in bedroom. Also made in window seats of standard height and width that can be specified for any length and built right into the house. Hand or automatic temperature control can be furnished in each Ja-Nar at moderate extra cost.

"If we could only leave out those ugly radiators!"

The architect smiled. "I am afraid that is impossible, Mrs. Gregory, but we can really make them very attractive."

"Here are some photographs of the Ja-Nar, a pressed steel radiator cover that slips right over the radiator. Finished at the factory to match your woodwork, the problem of appearance is solved."

"That would be splendid," exclaimed his client, after careful examination, "but won't that shut off some of the heat?"

"No," replied the architect. "There is positively no loss of radiation through the adjacent walls of the building, because the Ja-Nar is insulated. Then, too, it prevents currents of air from passing up behind the radiator, which so discolors your walls and draperies."

"Then," said Mrs. Gregory, after a moment of thoughtfulness, "I believe we had better put in the Ja-Nar."

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The Ja-Nar

THE FULTON CO., **(Coupon)**
Dept. D, Knoxville, Tenn.

Please send me the special blue prints of the Ja-Nar which you have prepared for architects. This is to put me under no obligation of any kind.

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The First National Bank, Birmingham, Alabama

Kaestner & Hecht Elevators

WHEN it was decided to replace the original elevators in The First National Bank Building, Birmingham, Mr. John Lewis, manager of the building, was delegated to investigate. He visited a number of cities inspecting elevators, and also covered personally the facilities of several elevator manufacturers. Upon his return he submitted a comprehensive report. Naturally, the competition for the installation was very keen.

The selection of K&H Elevators under these circumstances was a matter of special gratification to the members of our organization — and the service since given by K&H Elevators in this building has been a continuous source of justification to Mr. Lewis and the other men who determined upon their use.

Kaestner & Hecht Co.

Founded 1863 · *Chicago*

DETROIT BIRMINGHAM MINNEAPOLIS · MILWAUKEE · INDIANAPOLIS · OMAHA